

Organizational Structure of Deep Ground Reconnaissance for Future Divisions and Corps

A Monograph

By

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Abstract

Organizational Structure of Deep Ground Reconnaissance for Future Divisions and Corps by
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Long Range Surveillance Units (LRSUs) are the most suitable element that the Army possesses for efficient division and corps deep ground reconnaissance. Undeniably, divisions and corps require their own reconnaissance element. Unmanned assets, SOF SR teams, and RSTAs can not dependably perform this role. LRSUs however are flawed by their organizational structure, ultimately preventing them from reaching their full potential. However, they arguably maintain a solid foundation to refine the future deep reconnaissance units for divisions and corps. This refinement needs to exploit their special insertion skills, passive collection mentality, and unit esprit. Additionally, necessary improvements to this foundation of future reconnaissance units should focus on the LRSU organizational structure and more specifically a consolidation of all LRSUs into one brigade size headquarters. This unifying action will be the key influence for many other modifications. A centralized reconnaissance element will not just facilitate a much needed permanent role of the 'Chief of Recon', but also standardization of equipment, training, education, budgets, and most importantly leader development.

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INTRODUCTION

Since the beginning of warfare belligerents have sought to understand their enemies before they ultimately faced them in combat. Sun Tzu called this understanding ‘foreknowledge’ and preached it to the warlords of his day by discussing how “the enlightened prince and the wise general conquer the enemy...and their achievements surpass those of ordinary men is [through the use of] foreknowledge.” Sun Tzu went on to describe that “foreknowledge cannot be elicited from spirits, nor gods,...nor from calculations. It must be obtained from men who know the enemy situation.”¹ These ‘ordinary men’ that Sun Tzu addresses are the Soldiers that exist in the reconnaissance formations of today’s Army. They are there today, but changes to doctrine are needed to fully exploit their potential for future U.S. Army operations. The value and existence of men conducting ground reconnaissance is timeless. Maurice de Saxe, one of the great influences of Frederick the Great and ultimately Napoleon Bonaparte, claimed that “if [he] could see the enemy every day it would only be better, for this would soon put [him] in [position] to attempt anything.”² Imagine an alternative ending to the influential Battle of Gettysburg if Stuart had made his forces initially available to perform their critical role of the eyes for Lee’s Army of Northern Virginia. Reconnaissance efforts in the first day could have enabled the seizure of key terrain and ultimately changed the tide of the battle for the South. An alternative ending would have extended Lees’ campaign in the North and threaten the nation’s capitol. What if the French had employed a robust reconnaissance effort into their methodical defensive battle plan at the initial days of World War II? Consider the possible results of what was a superiorly equipped French army, armed with relevant enemy information of the German advance. Reports from well placed reconnaissance teams within eastern France could have repaired the chaotic French

¹ Samuel B. Griffith, *Sun Tzu: The Art of War*, (New York: Oxford University Press, 1963), 144-145.

² BG Thomas R. Phillips, *Roots of Strategy: The Five Greatest Military Classics of All Time; My Reveries Upon the Art of War* by Marshal Maurice de Saxe, 1732, (Mechanicsburg, PA: Stackpole Books, 1985), 224-225.

situation and provided early warning for troop displacements. An improved situational awareness for the French could have stalled the German war machine and ultimately reversed the early Allied failures, ultimately altering the longevity of World War II. Most recently, during the early stages of Operation Enduring Freedom, one can argue that an increased number of manned deep reconnaissance teams could have identified more enemy high value targets with even greater frequency. Also consider the value of these assets situated in northwest Iraq and the positive effects they could provide on border control.

The examples of effective reconnaissance efforts which have influenced military endstates are easily recognizable. Moreover, the list of circumstances where improved intelligence collection has changed history is endless. Yet today the Army continues to struggle with the proper employment and organization of its' contemporary reconnaissance assets. Most notable are the challenges with its' deep ground reconnaissance, which are defined as assets that perform intelligence collection for a division and corps. These challenges relate to the Army's need to design a new reconnaissance element. However, the new design must possess the proper organizational structure and resources to achieve infiltration in depth through various means and still maintain flexibility. Currently the Army possesses units that perform deep ground reconnaissance, but they must be refined to better support future division and corps commanders. In order to properly examine this situation, one first must consider the environment in which our deep ground reconnaissance assets operate.

The Environment

The current environment of our military today is complex and dangerous. Complexity exists because of both external and internal challenges opposed to our military. The external challenges are created from the Global War on Terror's multiple threats and the Nation States that support them. The enemy that the U.S. military currently and will continually face is arguably incapable of fitting a template or being modeled as a lethal kinetic design. Some believe that the

threat is an ideology and not an established and organized enemy. Regardless, in order to effectively combat a previously non-existent threat model or a different ideology, human collection capabilities will be critical if one accepts that “Soldiers are the Army’s best sensor – [they] receive and process information better than any technology.”³

Historical references provide us theories to properly counter a threat that is like the one we currently face today in Iraq, Afghanistan, and other places around the world. These threats are similar to those of insurgent forces of the past. They possess distinguishable characteristics such as a complicated yet fervent ideology, guerrilla tactics oriented to counter the asymmetry of our combat power, and counter occident cultural values. To formulate some understanding of these complexities, we must study their social framework. Acclaimed author Bard O’Neill lectures that in order to “better understand insurgencies, we need to go beyond the basic demographic attributes of a population and inquire about the impact of its social structure.”⁴ The importance of human collection capabilities was a common lesson from battling insurgents in Malaya, Algeria, and Arabia as was the unfavorable results from the practice of heavy handed tactics.⁵ The U.S. military must always be prepared to operate in an environment without symmetry. In such an environment, how does an Army mold an otherwise formless enemy? A potential solution to create an enemy form is with extensive human intelligence collection through the use of the local population with an emphasis on a holistic and systemic view of the enemy. One can perform this with educated reconnaissance Soldiers on the ground, like Sun Tzu’s ‘men’ who “know the enemy situation.”⁶

³ The Army Campaign Plan, slide 16.

⁴ Bard E. O’Neill, *Insurgency and Terrorism: Inside Modern Revolutionary Warfare*, (Dulles, Virginia: Brassey’s Inc., 1990), 59.

⁵ Ibid., 128.

⁶ Samuel B. Griffith, *Sun Tzu: The Art of War*, (New York: Oxford University Press, 1963), 144-145.

Adding to the complexity of the current environment are the U.S. Army's self-imposed challenges. Internally, the Army is its' own worst enemy. The Army is currently transforming with in a short time frame while it is at war. This split task priority makes it difficult to capture and incorporate the Army's current lessons while maintaining the recent and necessary high operational tempo (OPTEMPO). The Army is not being granted the necessary time for reflection, which is a characteristic greatly needed to make effective change in organizations.⁷ The legacy thought process had forced the Army to train for a kinetic and linear fight. Despite credible attempts to refine our Combined Training Centers (CTC) to take in to account the contemporary operating environment (COE), there still remains a need to break the Army's existing paradigm of how it employs, trains, and organizes its reconnaissance assets. Most Army organizations are grounded in the archaic mentality of how to prepare reconnaissance elements for war. The old way to employ reconnaissance assets is very linear and built around ground distance. One expects units like a LRSU, a reconnaissance and surveillance target acquisition (RSTA) troop, a cavalry troop, or a battalion scout platoon to operate only in their specifically defined area of operations (AO). This defined AO implied infiltrating across the current forward line of troops (FLOT) to report against specified named area of interest (NAI). One must accept that the new environment yearns for 'more' from the Army's reconnaissance assets. Reportedly, one now requires near-instant information and intelligence collection from the local populace in the contemporary operating environment. The term of "actionable intelligence" has monopolized almost every conversation of the current state of the intelligence community and was one of the immediate focus areas directed to be improved by the Chief of Staff in 2004.⁸ According to the Focus Area's charter, actionable intelligence means "providing commanders and Soldiers a high

⁷ Dietrich Dorner, *Logic of Failure: Why Things Go Wrong and What We Can Do to Make Them Right*, (New York: Metropolitan Books, 1989), 198.

⁸ Army Strategic Communications, *The Way Ahead: Our Army Relevant and Ready*, (Washington, DC: Pentagon, Room 38548, 2004), 15.

level of situational understanding, delivered with speed, accuracy and timeliness, in order to conduct successful operations.”⁹ Despite being overused, one can obtain the term’s unheralded value through a paradigm shift of collection and analysis from human intelligence collection resources. This ability to do more can only be accomplished with an in-depth knowledge of cultural customs, beliefs, and basic dialect skills, while balancing the methodology of the former tactics, techniques and procedures of a linear battlespace. This type of collection from the indigenous populace requires the individual ability to develop rapport and operate decentralized, as discussed in Major General Scales’ article of *Culture Centric Warfare*.¹⁰ Conventional types of reconnaissance units need to be capable of performing cultural collection for obvious reasons. Intelligence collection for a conventional unit from corps to brigade combat team (BCT) needs to maintain a habitual and dedicated asset. Habitual relationships may well be the critical node that also facilitates this type of collection. This culture-centric collection however remains only a single type of processing intelligence.

Types of Collection

Today there exist several types of maneuver human intelligence collection capabilities. The existence of these units imposes the continual controversy of ‘risk versus payoff’. Despite the valiant efforts of these units to produce better situational awareness or an improved common operating picture (COP) of the battlefield, their employment fuels a conceptual argument over the potential loss of life. Is the information being sought worth the lives of the personnel attempting to collect it? This commonly and necessarily proposed question is what every commander must face before planning to employ his reconnaissance element. Of course this question can only be answered with a specific situational understanding of each mission and a in-depth understanding

⁹ Ibid., 15.

¹⁰ MG Robert H. Scales, *Culture-Centric Warfare*, *Proceedings Magazine*, (<http://www.usni.org/proceedings/procurrenttoc.htm>: US Naval Institute, September 2004), 2.

of risk mitigation. In order for a commander to consider this dilemma he must first understand the type of unit he plans to employ and its training proficiency, equipment, and leadership. The alternative choices of today's more fortunate commanders regard the collection capabilities of non-human resources, like imagery intelligence (IMINT), signals intelligence (SIGINT), measurements and signature intelligence (MASINT), and open-source intelligence (OSINT).¹¹ These intelligence disciplines offer tremendous opportunities for the commander, but all possess limitations. The most notable limitations are weather effects, masking influenced by terrain, vegetation and urban structures, and the inability to conduct timely analysis. Human resources on the ground, performing HUMINT, can counter all of these stated limitations. Most importantly, if appropriately trained, they can provide instant analysis which achieves timely actionable intelligence. Instant or near-real time analysis on the objective would be a significant paradigm shift in intelligence collection, but necessary for future environments the Army will face.

Considering the theory in Max Boot's *Savage Wars of Peace*, the Army's future conflicts can best be predicted to be "Small Wars" or what Rudyard Kipling refers to as "Non-Wars" versus the large scale Nation State wars we experienced in World Wars I and II.¹² Despite significant theoretical and practical evidence to the contrary, military leaders tend to train and create military strengths required for large wars. The military industrial complex is directly influenced by this legacy mental model to produce large warships, state of the art aircraft, and technologically superior armored platforms in mass. Ultimately, this large scale war concept also influences how armies plan to conduct intelligence collection. The resulting emphasis on non-human resources minimizes the necessary value of human skills to conduct reconnaissance. Recognizing the legitimacy of preparing for 'Non-Wars' over the large war concept, human

¹¹ Department of the Army, *Field Manual 3-05.232: Special Force Group Intelligence Operations* (Washington, DC: Government Printing Office, February 2005), 1-6.

¹² Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power*, (New York: Basic Books, 2002), xiv & 282.

resource skills undoubtedly can provide added benefits of cultural awareness, language skills, and human senses where machine based non-human resources are unable.

Intelligence collection is a necessity prior to every combat action and the Army views information superiority as the means for “commanders to receive accurate, timely information that enables them to make better decisions and act faster than their adversaries.”¹³ This information dominance is a capstone goal for the current and future Army modular doctrine.¹⁴ In attempting to achieve this dominance, difficulties arise when conventional forces attempt to look deep and conduct intelligence collection at either the tactical or operational level. When a corps, division, or brigade combat team (BCT) attempts to collect intelligence it has two choices, human or non-human resources. As one acknowledges the value of human resources towards intelligence collection, it is necessary to address the current organizational structure of human resource collection-type units. This requirement ultimately compels one to identify the organizational flaws and propose potential solutions.

Collection Battlespace

The U.S. Army’s current force structure possesses three types of units that can conduct deep ground reconnaissance for conventional corps, divisions, and BCTs: Special Forces Operational Detachments Alpha (SFODA), long range surveillance units (LRSU), and BCT level reconnaissance and surveillance target acquisition (RSTA) battalions or armed reconnaissance squadrons (ARS). Each of these reconnaissance and surveillance units have their value in conducting deep ground reconnaissance missions, although some are more capable than others. For example a SFODA is more capable when there is a need for a language skill and special operations air platforms for insertion. Moreover, a LRSU is the better suited than an ARS or

¹³ Department of the Army, *Field Manual 3-0: Operations*, (Washington, DC: Government Printing Office, June 2001), 1-12.

¹⁴ *Army Comprehensive Guide to Modularity, Version 1.0*, (Fort Monroe, VA: Government Printing Office, 08 October, 2004), 2-18.

RSTA when stealth and passive collection is necessary. Defining the role of deep reconnaissance is complex and not solely related to linear ground distance. The legacy doctrine of FM 7-93 (*Long Range Surveillance Operations*) identified LRSUs and their habitual distance relationships to divisions and corps. A division LRS detachment's battlespace was relegated to collection up to the depth of 50 kilometers and a corps LRS Company's between 50 and 150 kilometers.¹⁵ (see Figure 1)

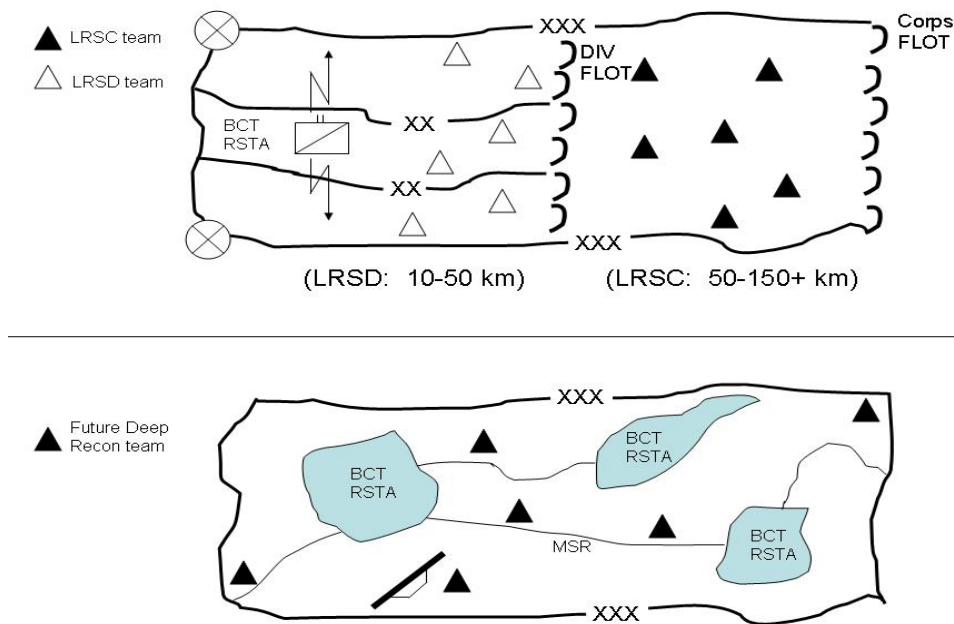


Figure 1: Contiguous and Non-contiguous battlespace for deep reconnaissance.

These linear boundaries are not as relevant in the contemporary environment that is now defined by a non-contiguous battlespace. Deep reconnaissance in a non-contiguous type of battlefield is relative to the specific size and type of the operating unit's AO. It may be only ten kilometers away, but the results of the intelligence collection may have 'deeper' consequences than just the next tactical operation. Ultimately, it may have operational and potentially strategic connotations

¹⁵ Department of the Army, *Field Manual 7-93: Long Range Surveillance Unit Operations*, (Washington, DC: Government Printing Office, 03 October 1995), 5.

similar to circumstances in Iraq when high value target personnel or weapons of mass destruction are identified. Realistically, the corps and divisions require reconnaissance to fill the gaps of both a linear and a non-contiguous battlefield. Moreover, these corps and division reconnaissance units need to possess unique capabilities to infiltrate in-depth with special skills and passively collect with unique equipment for multiple days.

LRSU: Most Suitable

The most applicable type of unit for deep collection is a SFODA reconnaissance team for many reasons. The strength of the team is mainly a product of its' all NCO rank structure and the individual's diverse expertise. The SFODA also has the luxury of a sufficient budget that supports ideal equipment and specialized training for reconnaissance. Unfortunately, SFODAs are not capable of maintaining dedicated support to conventional units at the corps to BCT level because "there simply are not enough available to act as the eyes and ears of tactical commanders."¹⁶ The U.S. Special Operations Command does not possess the resources to assist conventional forces since "SFODAs are low-density, high demand capabilities that cannot be quickly replaced."¹⁷ Unfortunately the RSTA force is not the answer either. They do not possess the special skills and equipment, nor do they maintain a personnel selection process. The conventional force does however possess a reconnaissance unit that performs missions with a SFODA-like capability. LRSUs are the only type of organization that offer dedicated and specialized deep reconnaissance capabilities for the corps and divisions. Within our current force structure, each active component light division and all reserve and active corps possess LRSUs. The diverse intelligence support they can offer to lower echelons is undeniable when you consider a LRSU's ability to provide human target identification, target acquisition or interdiction

¹⁶ Department of the Army, *Field Manual 3-05.20: Special Forces Operations*, (Washington, DC: Government Printing Office, 01 April 2004), 2-16.

¹⁷ *Ibid.*, 2-16.

that sets conditions for a future assaults, and for an economy of force through sensor emplacement. Therefore one must conclude that LRSUs should be the foundation for the future deep ground reconnaissance organizational structure. Acknowledging that LRSUs are invaluable to the future of intelligence collection, as concluded by the recently released *Global War on Terrorism Occasional Paper 10, Eyes Behind the Lines: US Army Long Range Reconnaissance and Surveillance Units*, there still remain some flaws that prevent its' most efficient employment.¹⁸ This paper will address these flaws and the steps that the U.S. Army can take now to make the LRSU the viable, flexible, and tactically efficient deep ground reconnaissance organization that is necessary to support the Division and Corps commanders.

Despite the unique and talented capabilities that LRSUs offer, their organizational structure can be improved to better support intelligence collection efforts. First off, the current LRSU organizational structure is not fundamentally modular and it is incapable of properly supporting the Army's transforming divisions.¹⁹ The current LRSUs are not modular because they are all dissimilar and do not possess standardized mission essential task lists, standardized equipment, standardized budgets, nor do they possess an experienced leader base that ensures proper employment and utilization.²⁰ If proper employment is the catalyst to achieving true results, then the reasons for improper employment should be addressed. There are undeniably

¹⁸ James F. Gebhardt, *Eyes Behind the Lines: US Army Long Range Reconnaissance and Surveillance Units*, *Global War on Terrorism Occasional Paper 10*, (Fort Leavenworth, KS: Combat Studies Institute Press, 2005), 160.

¹⁹ Department of the Army, *Field Manual 3.55-93: Long Range Surveillance Operations (Preliminary Draft)*, (Washington, DC: Government Printing Office, 01 June 2004). It is not possible to take a LRSU plug into any deploying division or UEx headquarters that it was not habitually connected to and obtain the same training proficiencies since every LRSU has a different METL and equipment.

²⁰ Personal research conducted while serving in the role of the commander of Company D, 4th Ranger Training Battalion, the Army's Reconnaissance and Surveillance Leader Course (RSLC), for a period of 26 months. During this time period I interacted with every LRSU in the Army either in person, phone/email, or through their websites. I was able to gather knowledge of all of their METLs, their budgets, and their equipment variations. My claim on the lack of experienced based leadership comes from first hand knowledge of commanding a LRSC (XVIII Abn Corps) for 14 months and a LRSC (I Corps) platoon leader in two separate corps previous to the RSLC command tour. I was also able draw observations of unit leadership at the battalion and company through five mobile training team experiences and one external LRSC Exercise Evaluation (EXEVAL) during my company command tenure.

many historic operational examples of improper team employment and unexploited use of their capabilities during the LRSU community's relative short history. Most recently during combat operations in support of the Global War on Terror (GWOT) were these problems were made more evident when only three teams were inserted out of thirty-six during the initial combat phases in Iraq.²¹ Taking into account the history of LRSU's and the need for deep ground reconnaissance units in the future, one must question how best to refine LRSUs in order to better support intelligence collection for divisions and corps. The solution for improved deep ground reconnaissance is a consolidated LRSU organizational structure. Such a consolidated unit can provide centralized leadership that has been lacking. The existence of a consolidated unit, regardless of what it is titled, can provide a more efficient solution for the division and corps commanders to achieve that elusive goal of Sun Tzu's 'foreknowledge' that has been sought for so long.

BACKGROUND

Previous Deep Ground Reconnaissance Research

Following World War I each participating military actor conducted some type of reflection and contemplated how to improve or refine their approach to combat. The early results of World War II show that the German Army appeared to have fully exploited this period of reflection by systematically defeating seven European countries between September 1939 and June 1940.²² Can the U.S. Army follow the German lead and do the same as we now consider "*The Way Ahead*"? More specifically, can the U.S. Army refine its division and corps deep

²¹ COL Gregory Fontenot, LTC E. J. Degen, LTC David Tohn, *On Point: The United States Army in Operation Iraqi Freedom*, (Fort Leavenworth, KS: Combat Studies Institute Press, 2004), 163.

²² Geoffrey Parker, *The Cambridge Illustrated History of Warfare: The Triumph of the West*, (New York: Cambridge University Press, 1995), 305-310. The German army defeated Poland, Denmark, Norway, Holland, Belgium, Luxemburg, and France in sequence through the use of their Blitzkrieg techniques from SEP 1939 to JUN 1940. Some of the German offensives overwhelmed the defending countries (Norway, Luxemburg, and Denmark) in only one day.

ground reconnaissance assets to be efficient and valid for the contemporary operating environment and the future? One first must understand the topic in a historic context, examine recent operational findings, review its doctrine, and ultimately synthesize these observations to produce any relevant recommendations. To accomplish this task it is necessary to regard some previous monographs and theses on the related subject and compare their findings to more recent publications, recent combat operations, and individual experiences.

LRSU Community

The relative small size of the LRSU community is indicative of the amount of prior research that has been conducted on the topic of deep ground reconnaissance. Analyzing the previous research on this topic unearths common recommendations and themes that have transcended the years, but unfortunately were unable to gain any traction. These themes of improving deep ground reconnaissance evolved within an elite group of concerned experts that were a part of the LRSU community. Frustration was rampant throughout, as many identified very innovative solutions to complex problems that hindered the great potential of LRSUs. Lineages and histories were investigated and the legacy doctrine dissected in detail. The stand-out works include four previous LRSU commanders: Cochran (1995), Anders (1999), Meadows (2000), and Keaveny (2002). Each author seemed inspired to create a better way of conducting reconnaissance for divisions and corps. As students of military history and seasoned LRSU leaders, they intuitively knew of the LRSU potential and value to the Army. Cochran, Meadows, and Anders all determined that the LRSU force structure was flawed and in need of some revision. Keaveny, from a more realist perspective, concluded that there must be an “enforceable oversight”, but implied that may be obtained through an “educated staff.”²³ All authors seemingly struggled to prove the relevance of LRSUs to the future force. Their recommendations

²³ LTC David Anders, *Long Range Surveillance Unit Application in Joint Vision 2010*, (Fort Leavenworth, KS: MMAS Thesis, 1999), 72.

warrant much merit. One may particularly find their recommendations of LRSU consolidation quite useful as a potential remedy for a more efficient collection effort. Other valuable common findings from this group are the references to re-naming LRSUs, improving flexibility, and internal manning.

The overall implication of these authors clearly shows the need to unite LRSUs together to best exploit their amazingly unique capabilities. Despite the valiant efforts to publicize these relevant ideas of consolidation, the status quo was strongly entrenched with bureaucracy that prevented necessary change.²⁴ A rationale for the lack of LRSU evolution may be attributed to the scarcity of senior Army leadership with deep ground reconnaissance experience and the small population of former LRSU commanders that have published ideas. Both lack of leadership and few published works contribute to this theme not receiving the dire public recognition it merits.

Potential obstacles hindering this colossal need for change can also be linked to the dual proponency that existed of LRSUs by the Military Intelligence and Infantry Centers. Maintaining a dual proponency for a combat arms specialty is similar to that of a child raised by divorced parents living in two separate states, both attempting to make ideal life choices for the child although not fully understanding the child, or the complex system, of which they are dealing. As a result of the dual proponency, the LRSU community became somewhat dysfunctional. Ultimately the community struggled for two decades with its' organizational structure to no avail. Difficulties with refinements to the Tables of Organization (TOE) and the absurd timeliness of updating modified tables of organization (MTOE) are directly related to a much too complicated Total Army Analysis (TAA) process.²⁵ However, there has been recent progress with the U.S.

²⁴ Consolidation idea has been recommended by published MMAS thesis of, multiple former commanders of RSLC/LRSLC, including the current commander (FEB 2006), and it has been the general opinion of multiple former LRSD/LRSC commanders.

²⁵ U.S. Army War College, *The Way the Army Runs: A Senior Leader Reference Handbook*, (Carlisle, PA: 2003-2004), 48-50 and 51-60.

Army Infantry Center and School (USAICS) assuming the singular role of proponent for the LRSU community.

Today is currently a time of massive change. The Army transformation plan laid out in *The Way Ahead* defines the need to adapt to the current operating environment, most notably with “actionable intelligence” as an immediate focus area.²⁶ One must embrace this wave of change and investigate the deep ground reconnaissance force structure. In order to do this one must place particular emphasis on the change that addresses leader decisions involving risk mitigation, the cognitive shift of team level near-instant analysis, and the need for a new title for such an organization. Other emphasis must also relate to the support of modularity without the need for habitual relationships, incorporating flexibility, and how these concepts will meet the threat of the ‘Small Wars’ that our military will most likely face in the future.

Doctrine and Historic Context

In order to better understand what needs to change with deep ground reconnaissance and to determine explanations for the current organization structure, it is important to analyze recent operations and relevant Army future employment doctrine. This can be accomplished with a clean break of current paradigms regarding legacy reconnaissance doctrine and through in-depth research of previous deep reconnaissance topics. An insight into Army force management, which is influenced by unit requirements, will assist in understanding why the current reconnaissance organizational structure exists.²⁷ Much relevant data is also included in many historic Army publications like: *Military Intelligence Professional Bulletin*, the *Infantry Magazine*, *Parameters* and *Occasional Papers* from the Combat Studies Institute. Most notable of these works is that of Mr. James F. Gebhardt in his *Occasional Paper #10* regarding LRSUs. His writings contributed

²⁶ General Peter J. Schoomaker, *The Way Ahead*, (Washington, DC: Government Printing Officer, November, 2003), 15.

²⁷ U.S. Command and General Staff College, *F100: Force Management, 2003 Primer, Force Development*, (Fort Leavenworth, KS: CGSC, 2005), 16.

immensely to understanding the complicated origins of the entire deep reconnaissance history and its continued relevance for the future. Other supporting evidence regarding the insight into the efficiency of LRSU doctrine, recent employment practices, and the current organization has been drawn from sources such as *On Point: the United States Army in Operation Iraqi Freedom*, personal interviews from former LRSU commanders during OIF and OEF, old Long Range Reconnaissance Patrol (LRRP) field manuals, and published notes on the Reconnaissance and Surveillance Leader Course's sponsored *2004 LRS Symposium*. Current and past LRSU doctrine field manuals *FM 7-93* and *Draft FM 3-55.93* compared to the *Army Campaign Plan*, and *The Way Ahead* determine how legacy doctrine supports the future force vision.

The internal and external leadership role in the LRSU community has not decisively been addressed in the past. In order to properly understand this role, critical analysis must be determined through the use of past and current doctrine and notes from personal interviews, personal experiences, and observations. Some past monographs and theses have not fully exploited certain web based products, but the *Reconnaissance and Surveillance Leader Course website* can provide invaluable insight for the most current updates on training, LRSU structure refinements, and input from the field. Moreover, the value of the emergent theory of Systemic Operational Design (SOD) for improved intelligence collection process has not been considered previously with reconnaissance and surveillance topics, but deserves inclusion into this topic.

Recent TRADOC Analysis

Recently the Army conducted research on long range ground reconnaissance. The conclusions and recommendations although well supported through analytical data, are only a small step in the right direction. In March 2005, the Combined Arms Center (CAC) tasked TRADOC Analysis Center (TRAC) "to perform an analysis of what long-range ground reconnaissance capability is needed in the BfSB (battlefield surveillance brigade) to support division information requirements. The results of this analysis were required by 1 August 2005 to

support upcoming TAA decisions. TRAC accepted the study tasking and titled the project *Long Range Ground Reconnaissance (LRGR) Study*.” Adhering to the Army Chief of Staff’s guidance, TRAC gathered data utilizing SMEs, retired senior officers, and multiple computer simulations that included geographically oriented threat scenarios to conduct their analysis. These scenarios replicated both major combat operations and support and stability operations in regions that most likely may contain a future conflict.

The BfSB organization, whose concept was originally known as the Reconnaissance, Surveillance, and Target Acquisition (RSTA) Brigade, is comprised of a brigade troop battalion, a MI battalion, and a Reconnaissance and Surveillance battalion.²⁸ The BfSB title was thus created to avoid any misunderstanding between BCT level RSTAs and the formerly labeled UEx or UEy level RSTAs. Unfortunately the R&S battalion within the BfSB organization is more like a cavalry unit possessing increased mobility and firepower with the two mounted 19D troops. (see Figure 2)

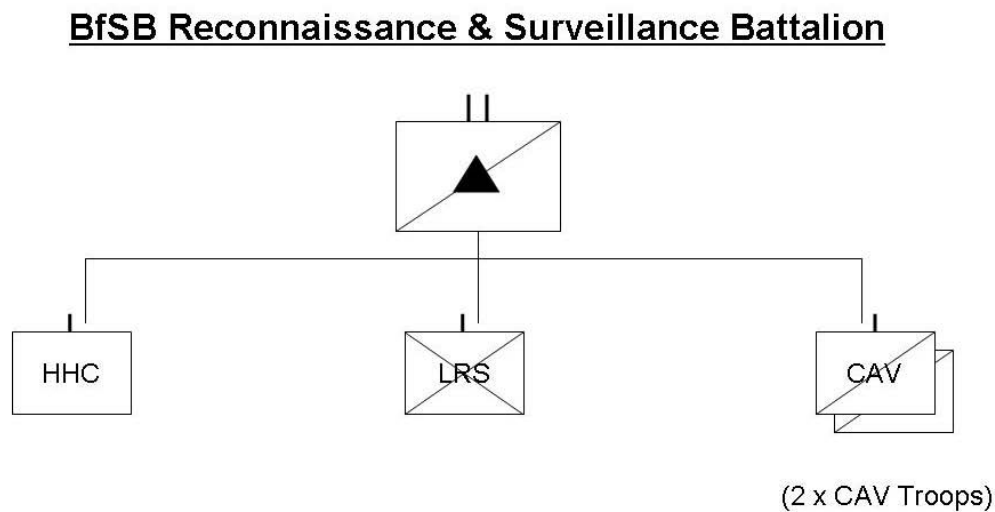


Figure 2: R&S Battalion from BfSB (TRAC: LRGR Final Report, OCT 2005, I-ii)

²⁸ TRADOC Analysis Center (TRAC), *LRGR Symposium Final Report*, (Fort Leavenworth, KS: 22 NOV 2005), Executive Summary 1.

Conclusions from LRGR Symposium, which influenced the BfSB recommendation, were arguably biased from the audience that participated.²⁹ Considering the background of the SMEs one could infer that the majority might maintain prejudiced opinions because of their cavalry backgrounds. The truth remains that cavalry and LRSU methodologies are two very different approaches and mind sets. A cavalry approach is more aggressive, and meeting engagement oriented, versus a very passive and collection oriented LRSU methodology. Comparing the Army's population lack of existing LRSU leadership to that of a much larger cavalry population, derived from units like the two active armored cavalry regiments, the NTC based armored cavalry regiment, and the Army's 1st Cavalry Division, one may conclude that any recommendation for future units will be cavalry biased. The LRGR Study decisions also were seemingly influenced by the cavalry background of the O-5 concept developer from the Combined Arms Doctrine Directorate (CADD) and that of the current CAC commander. "On 4 August 2005, TRAC briefed LTG Wallace on the results of the LRGR Study. During that briefing, the CG stated that the maximum surveillance team mission duration specified in the operational concept (four to seven days without re-supply) is overly optimistic."³⁰ This type of comment displays a general lack of understanding about LRSU capabilities and ones inability to see past their own operational experiences or mental models. Despite the cited commentator's fine reputation and in-depth personal knowledge of reconnaissance, one can deduce that this insight had a propensity to favor a cavalry heavy option for a BfSB. It is also easy to conclude that despite the detailed and exhaustive work performed by the TRAC and the CADD, influential personalities that were involved from the start maintained predispositions of the future of deep ground or long range ground reconnaissance. Interestingly, upon review of the TRAC literature documents used in the

²⁹ Ibid., v.

³⁰ Ibid., I-4 (see signature block and POC data), LTG Scott Wallace was the current Combined Arms Center commander and LTC Andy Fowler was the CADD point of contact and heavily involved in the decision making process. Both officers have prestigious and extensive backgrounds with cavalry units.

study, there is no reference to any published works from former LRSU commanders. The study's ultimate recommendation was a combination of CADD doctrine writers, a panel of SME (with only one LRSU representative), and a group of retired generals with no recent operational experience in the GWOT.³¹

In light of the background of former theses, monographs, doctrinal reviews, historical accounts, personal experiences, and relevant websites, there exists a void of information. One must consider emergent and dated theories to adequately investigate the topic of deep ground reconnaissance. A respect for the general systems theory, intuition based decision making, and cybernetics such as artificial intelligence is helpful to approach intelligence collection with a fresh vantage. In order to gain a proper perception of the complex future of reconnaissance for divisions and corps, diverse and varied amounts of data are necessary to achieve enlightenment.

BREAKING THE GORDIAN KNOT

The Future of Deep Ground Reconnaissance

The process of “cognitive reform is hard to perform” to create the major modifications that retired Major General Scales proposes for intelligence collection in the Special Forces community.³² It will be just as difficult to create this necessary change in the conventional forces view of reconnaissance also. Peter Senge, an author of works related to the General Systems Theory, describes a need for ‘cognitive reform’ and a “shift of mind” in order to break the “mental models” that create generalizations which hinder learning.³³ Alexander the Great faced similar challenges with the fabled Gordian Knot; by viewing the problem from a different

³¹ Ibid., 7.

³² MG Robert H. Scales, *Culture-Centric Warfare, Proceedings Magazine*, (<http://www.usni.org/proceedings/procurrenttoc.htm>: US Naval Institute, September 2004), 1.

³³ Peter M. Senge, *The Fifth Discipline*, (New York: Doubleday, 1990), 8.

perspective he was able to sever it and become king.³⁴ One must consider the future of deep ground reconnaissance with a similar perspective as Alexander. In order to create change, one must approach deep ground reconnaissance with a fresh way of thinking.

Senge's 'shifts' may provide assistance with this new outlook by accepting a systemic view of the world. He writes that in order to achieve this, one must create learning organizations that can facilitate this perspective. Senge ideas are inspired by the belief that all universal forces have relationships.³⁵ Intelligence collection is grounded in the views of relationships. For example, when one creates a NAI to identify patterns and indicators of the enemy's future actions, one is ultimately trying to understand the enemy as a system. In doing this one is in essence trying to predict the future. A systems way of thinking aids in finding influences that are typically hidden from normal view, especially if it considers a holistic perspective of the situation.³⁶ A holistic approach is more useful instead of a historic reductionism view which only considers individual parts. Reductionism can prevent one from understanding the entire enemy situation or more simply what the fundamental 'problem' is. With this perspective it is necessary to also consider how the observer's actions may influence the system, whereas any injection of energy will cause change. One needs 'mental shifts' for more than just simply executing intelligence collection with a holistic systems view. They are necessary to accept new perspectives on what the future of deep ground reconnaissance for a division and corps should look like. A proper cognitive shift will enable the emergence of warrants that support the restructuring of deep ground reconnaissance organizations. This refinement of a consolidated unit has three major components. Primarily, a LRSU is the most similar element to a legitimate deep ground reconnaissance force structure and it is an ideal basis for future units. Moreover,

³⁴ Alexander the Great.co.uk.com, history website, http://www.alexander-the-great.co.uk/gordian_knot.htm.

³⁵ Peter M. Senge, *The Fifth Discipline*, (New York: Doubleday, 1990), 3.

³⁶ Ibid, 7.

human assets will always be needed in the intelligence collection business. Ultimately one must also recognize that SFODAs are incapable of providing special reconnaissance for divisions and corps like originally believed by some ill-informed commanders.

LRSU: The Deep Ground Reconnaissance Optimal Solution

In order to improve our reconnaissance capabilities as an Army we must first accept that the current structure is flawed and the future BfSB concept that is being presented by TRADOC is not the ideal solution. Today division and corps commanders do not have an adequate human collection capability for the current environment. It can be argued that poor intelligence collection was to blame for the lack of successful U.S. military actions involving counter-terrorism and the killing or capturing of high value targets during 2001. Although the term, intelligence failure, is overused and typically misrepresented, there is some cold truth in its use. There truly is a need for change in at least one portion of the U.S military intelligence community and it involves a new perspective of deep ground reconnaissance. Every division in the Army needs a deep ground reconnaissance capability to conduct “comprehensive reconnaissance efforts at far greater depths than were required in the cold war defense. They [also] need to understand their enemy organizational counterpart, and its systemic components.”³⁷ Unfortunately the current force structure holds the majority of the reconnaissance assets below the BCT level and only some divisions have the capability to conduct their own collection.³⁸ There is hope. The current Army organizational structure possesses an ideal unit to use as a foundation for deep ground reconnaissance. LRSUs maintain great potential for intelligence collection. Yet it is

³⁷ BG(R) Huba Wass de Czege, *Task Force Modularity: Analysis Underpinning Recommendation to the CSA*, (Fort Leavenworth, KS: TRADOC Analysis Center, 31 March 2004), 37, footnote #28.

³⁸ RSLC website, currently the 101st airborne division (assault) has temporarily de-activated their LRSD. The 2nd Infantry Division has also temporarily de-activated their LRSD until the future BfSB concept is finalized. This leaves six active component LRSUs for the 82nd, 10th, 25th, 173rd Abn BCT, XVIII Abn Corps, and V Corps LRSUs still currently operating. The reserve component still maintains ten LRSUs for the 29th, 29th, 34th, 35th, 42nd, 48th, and the 49th divisions and I and III Corps.

disappointing to observe its' under exploitation. The LRSU is the closest 'real thing' to deep ground reconnaissance that a division or corps can currently employ and provides a cornerstone to build from. The talent and methodology inherent in the LRSU community are undeniable. Therefore it is an ideal starting point for developing a future deep ground reconnaissance organization.

Just as the Vietnam era LRRPs drew their lineage directly from the Ranger history and arguably indirectly from the actions of the Jedburgh Teams in the Office of Strategic Services (OSS), so could our future deep ground reconnaissance organization draw theirs' from the current LRSUs.³⁹ The organization titles of the LRRP units in Vietnam by 01 January 1969 were all affiliated with the 75th Rangers Regiment, although a centralized regimental headquarters was not active.⁴⁰ Veterans of these units were the foundation for the creation of 1st Ranger Battalion in 1974. As the tradition was passed from the LRRP concept to the LRSU one, many of the LRRP organizational titles and history were carried on. The current corps LRSUs are titled Echo and Foxtrot companies from the 51st and 52nd regiments respectively. Unofficially, some of the division LRS detachments still embraced the 75th legacy, like the 101st airborne division's LRSD continuing the motto's of Lima Company 75th Ranger where they believe that "they are us, we are them, (and) the legend lives on."⁴¹ The LRSU lineage, although only twenty years old, now possesses combat action vignettes from the GWOT to add to the prestigious ones of the LRRPs'

³⁹ Russell Miller, *Behind the Line: The Oral History of Special Operations in World War II*, (New York: St Martins Press, 2002), 146. Jedburgh Teams were 4-6 man international teams that performed behind the lines missions during World War II. Some of their tasks were related to reconnaissance for follow on forces, although the majority of the tasks revolved around espionage, raids, and insurgency actions. The Special Forces officially lay claim to their lineage, but the foundation of ideas and techniques can be passed on and unit histories are invaluable to creating esprit de corps within military organizations.

⁴⁰ John K. Mahon, John K. and Danysh, Romana, *Army Lineage Series Infantry Part I: Regular Army*, (Washington, DC: Office Of The Chief Of Military History United States Army, 1972), website: <http://www.army.mil/cmh/books/Lineage/in/infantry.htm#13>.

⁴¹ Sergeant Linderer, Gary A., *Six Silent Men: 101st LRP Rangers*, Book Three, (New York: Ivy Books, 1997), 2.

which includes three Medal of Honor recipients from the Vietnam War.⁴² Not only will the lineage of the existing LRSU's provide valued unit pride to draw from, it will also provide a good foundation to emerging concepts of how to structure, educate, equip, and employ them. Most importantly is the inculcation of a common ethos of passive and stealthy execution of their missions. This ethos varies greatly with the opposing cavalry style of reconnaissance-in-force which is mostly geared to a more lethal and aggressive approach. The cavalry method tends to be less risk adverse and less likely to be effective when human interaction with non-combatants is essential and the battlespace is unconventional and non-linear. Considering these different methods one must agree that the LRSU concept is best suited for divisions and corps. Unfortunately not every division currently maintains a LRSU. The heavy divisions de-activated their LRSUs shortly following Desert Storm.⁴³ As one looks toward the future of deep ground reconnaissance, worthy qualities of historic examples should be considered. If characteristics like stealth, special skills which enable infiltration in depth, and efficient information collection are essential for division and corps level reconnaissance units, then LRSUs provide a good doctrine base from which to originate.

A LRSU offers several key characteristics for the foundation of a refined organization. The most critical is the assessment and selection process that LRSUs maintain.⁴⁴ A future deep reconnaissance unit should continue this process to foster an environment of specially selected personnel that thrive on an ethos of making difficult tasks appear easy. There is much value for a unit manned with multiple-time volunteers. Potential candidates for a deep reconnaissance unit

⁴² Shelby Stanton. *Rangers at War: LRRPs in Vietnam*, (New York: Ivy Books, 1992), 304. The Medal of Honor recipients were Staff Sergeant Lazslo Rabel from the 74th Infantry Detachment (LRRP), 173rd Airborne Brigade, SPC4 Robert D. Law from Company I (Ranger) 75th Infantry, 1st Infantry Division, and Staff Sergeant Robert J. Pruden from Company G (Ranger), 75th Infantry, 23rd Infantry Division.

⁴³ James F. Gebhardt, *Eyes Behind the Lines: US Army Long Range Reconnaissance and Surveillance Units, Global War on Terrorism Occasional Paper 10*, (Fort Leavenworth, KS: Combat Studies Institute Press, 2005), 117-119.

⁴⁴ Department of the Army, *FM 3-55.93: Long Range Surveillance Operations*, (Washington, DC: Government Printing Office, 2004), Appendix B, Assessment and Selection.

have volunteered for the Army, airborne training, and now for a special unit. Much can be said for a unit with value based personnel such as this. Without some type of selection process however, the quality of personnel will not be the same. “Nothing Is Impossible”, “Who Dares Wins”, and “In Orbe Terrum Non Visi (In and Around the World Unseen)” are watch words of special units.⁴⁵ These units maintain an essential amount of pride in what they do and what they represent.

To conduct deep ground reconnaissance for a division or corps implies certain hazards. A unique type of individual embraces this danger and succeeds regardless. There are certain influences that cause this mentality. These influences are typically ingrained in the individual previous to becoming a part of the organization, but it can be reinforced and inspired by proper training; trust in equipment, unit pride, and the confidence in their companions. This can best be accomplished with small unit organizations like SFODAs, Ranger squads, and LRSU teams. Moreover, this type of esprit can not be accomplished with 19D military occupational skill (MOS) acquired from just a few months of basic and advanced individual training (AIT). There is more to it than that. A functional future for the Army’s deep ground reconnaissance deserves more than that. TRAC has offered a recommendation to the Army Chief of Staff of an organization that is comprised of two cavalry troops, only one LRS company, and a headquarters element.⁴⁶ That just won’t work. The BfSB misses the mark by placing too much emphasis on the cavalry coded elements within the organization. In order to properly support a division or corps level headquarters with deep ground reconnaissance, an organization needs to be equipped with mature, specially selected personnel with an adequate mentality that is passive and stealth-

⁴⁵ These are international elite unit mottos which are commonly known. The Special Mission Group (SMG) motto from the Republic of Korea’s Army is “Nothing is Impossible”. “Who Dares Wins” is the motto of the British Special Air Services (SAS). “In Orbe Terrum Non Visi” is the motto for the Long Range Surveillance community.

⁴⁶ TRAC, *LRGR Final Report*, (Fort Leavenworth, KS: TRADOC, 2005), I-ii. Figure is recommended organization for R&S battalion in the Battlefield Surveillance Brigade approved by LTG Wallace in OCT 2005.

centric, not an aggressive mentality that is inherent in the cavalry culture. The right Soldier at the right location on the battlefield, with the right equipment can make all the difference, but the right equipment is just part of the solution and will never replace the perpetual need for the right men on the ground.

Man vs. Machine

There are some that believe technology can provide a network centric future, with strictly computer analysis, to allow our commanders to “see first, understand the situation more quickly and accurately, and act faster than their adversaries.”⁴⁷ Army doctrine openly states that “while technology improve(s) performance, Soldiers remain the Army’s most important resource,” but this axiom seems to falter when applied to intelligence collection with conventional forces.⁴⁸ Considering operational examples of the Army’s use of human assets in reconnaissance operations during Desert Storm, Somalia, and initial phases of the GWOT it is easy to conclude that LRSUs were not fully exploited to their utmost potential.⁴⁹ Most of their employments were limited in both depth and importance relative to the overall concept of the operation. Arguably the historic use of LRSUs, until the GWOT, had been equally unimpressive. It appears that LRSUs were employed solely because they were an available resource versus a necessary one for mission success. The lack of understanding of a LRSU’s full potential has been a huge obstacle. This perception is attributed to many reasons that have previously been stated, but one of the most damaging and ill-informed influences are that of technology and its role in intelligence collection. Arguably there are some commanders who believe that technology will replace human collection assets. Their argument is supported with inaccurate warrants and no evidence.

⁴⁷ Department of the Army, *Field Manual 3-0: Operations*, (Washington, DC: Government Printing Office, June 2001, 1-12.

⁴⁸ Ibid., 1-13. Quote taken from operational vignette of Operation Desert Hammer IV and the use of Dismounted Digital Solider System (DDSS) at the National Training Center.

⁴⁹ James F. Gebhardt, *Eyes Behind the Lines: US Army Long Range Reconnaissance and Surveillance Units*, (Fort Leavenworth, KS: Combat Studies Institute, 2005), 122-130.

Some also believe that satellites, unmanned, and manned aerial vehicles can provide unlimited imagery that will provide a comprehensive common operating picture for the commander. The use of these air and space based assets are highly regarded by commanders because of the low threat to human life. The risk adverse nature of the Army thrives on this technology. Although the proposed truth remains that human collection capabilities are necessary on the ground in order to obtain the best possible situational awareness.

During the Kosovo air campaign of 2000, collection analysts were deceived by artificial models of bridges and armored vehicles because of their sole reliance of air and space collection platforms.⁵⁰ There are documented cases of inaccurate combat assessments at the beginning of Operation Iraqi Freedom (OIF) also.⁵¹ These cases involved the inability of determining bomb assessment and analysis of structures that were difficult to determine solely from a top down or partial oblique perspective. Many of these instances could have been augmented with on the ground surveillance perspective that would have provided much more clarity.

Although the utilization of different vantage points is critical, it is only one way that human intelligence collection can contribute to the common operating picture. Not all human senses can be replicated by technology. When all other means fail in the collection process, human touch and the sense of smell can provide invaluable information, together with the individual's inherent ability to better perceive what is before them when compared to an electronic asset. Given the proper environment where a critical information requirement must be determined, human senses are the only sure way to accomplish that. Human senses are also a valuable way to counter the enemy's use of deception. There are multiple known instances where the use of technology based collection platforms was counterproductive. Unmanned Aerial

⁵⁰ RSLC Target Acquisition class displays photos of Kosovar bridge and mock armored tank nearby. Slides prepared and researched by SFC Mark Herlick (D Co. 4th RTB) 2002-2005.

⁵¹ Information received from the attending RSLC representative (SFC Gary Carty) from the Battle Damage Assessment symposium held in the summer of 2003 in Virginia Beach, VA.

Vehicles (UAVs) emit a noise signature that, when used to supplement another collection platform, can compromise activity at the intended NAI. Humans are undeniably capable of compromising their positions also, but these signatures of noise, light, and movement can be reduced through discipline. Examples of such type of discipline are numerous to include the French reconnaissance actions in Indo China in the 1950s, the 101st LRRP teams' performance in Vietnam, and the recent activities of the XVIII airborne corps LRSU on the Syrian border in 2005.⁵² Moreover, it is difficult to dismiss the contributions of a disciplined reconnaissance team, comprised of men, to the overall collection effort.

Of all the collection platforms, human asset seem the most environmentally resilient. Weather can greatly disrupt technological collection assets from performing their task. High winds negatively effect UAV flight and can ground this great capability. Precipitation is capable of causing problems with data transfer in the extremely high frequency spectrum (EHF), which unfortunately is the spectrum that facilitates large bandwidth files which transmit images.⁵³ Satellites are also subject to disturbances by weather in space and atmospheric attenuation. Moreover, dust storms, snowfall, and torrential rain downpours are all environmental concerns that play a role in obstructing intelligence collection. Fortunately human skills can provide contingencies to these weather effects on technology. Ironically, poor weather is also the best tactical scenario for a stealthy human infiltration. Heavy rains drown out noises from Soldiers' movements, blinding snowfall conceals movement and quickly covers tracks left behind, and sand storms provide permanent obscuration from the enemy. Obviously, the poor conditions equally affect the morale of both acting belligerents in conflict, but tend to favor the offensively

⁵² George Robert Elford, *Devils Guard*, (St Petersburg, FL: Hailer Publishing, 1971), 162. The *Devil's Guard* explains the actions of a French Foreign Legion battalion in an area reconnaissance effort. Interestingly, this unit consisted of former German SS soldiers. Their tactics, discipline, and method to guerrilla warfare against the Viet Minh are portrayed throughout the book and despite their immoral methods their legendary efforts were quite effective against Viet Minh operations.

⁵³ Information obtained through course notes of Space Operations Course (3Y) at the U.S. Army Command and General Staff College.

oriented one. Severe weather also provides security to the active collector, since static opponents are typically more concerned with avoiding the elements instead of increasing their security posture.⁵⁴ Despite the recognizable challenges to operating in harsh conditions, one can infer that intelligence gathering by Soldiers with the proper equipment and discipline is much more resilient and reliable.

The perpetual dilemma of ‘man versus machine’ is not pertinent only to weather and human senses, but it is most relevant when operating in a complex urban environment. At least for now, technology can simply not see through walls. Humans can not see through walls either, but they possess the ability to get within them and successfully collect information. Large vertical urban structures can also mask targets. Human collection teams can counter the masking effect and provide unlimited value to gaining intelligence inside urban settings. A man can provide precise knowledge of structural integrity of buildings, subsurface data, and energy requirements when IMINT assets can not. Most importantly, humans can provide in-depth information about the inhabitants’ culture and customs simply by judging behavior or subsequently through social interaction. The paratroopers of Roger Trinquier prided themselves in gathering HUMINT and ultimately found this knowledge to be most useful in their dealings with the Algerian National Liberation Front (FLN). The tactical successes that the French achieved participating in this subversive warfare, as unacceptable as some of their techniques seem today, were achieved with the use of aggressive human interface not technology. Although an unethical example of success, it is undeniable that without the use of human resources, the

⁵⁴ Opinion determined through thirteen years of service in the infantry which includes numerous experiences involving and infiltrating offensive force and a defensive force in extreme weather conditions. Weather conditions varied from snow, rain, sleet, electrical storms, extreme temperatures and varying degrees of unit level discipline. My opinion concludes that most units/individuals will be more concerned with protection from the weather rather than increasing their security posture.

French would have never understood the FLN inner-workings and organizational structure.⁵⁵

Assuredly successful collection dependent on social and ethnic knowledge can be performed with complete adherence to human dignity. Regardless, this in-depth knowledge of the local populace facilitated a systematic destruction of the FLN by the French. With hindsight, this historic data base example could have been exploited with more diplomatic and moral terms.

While technology provides an undeniable leverage to Army operations, “if you desire to defend and protect [land], and keep it for civilization, you must do this on the ground, the way the Roman legions did, by putting your young men into the mud.”⁵⁶ There are examples of U.S. forces doing just that in Operation Enduring Freedom (OEF), when a reconnaissance unit observed a heavy machine gun position in the Shahikot Valley. This machine gun position had been over flown by aerial assets in previous days, but remained undetected until discovered by HUMINT. If not for the reconnaissance efforts of the men on the ground, the machine gun could have easily shot down Army CH-47 helicopters the following day. Sean Naylor, an acclaimed author of OEF accounts, dutifully explains that “this was a lesson for anyone who thought the U.S. military’s billions of dollars’ worth of spy satellites and surveillance aircraft obviated the need for ground reconnaissance.”⁵⁷ The inherent risks incurred with humans ‘in the mud’ instead of technological intelligence collection, while challenging as they may be, can be mitigated through proper leadership, equipment, training, and manning.

Professional soldiers do not maintain sole ownership of the technology versus man discourse. Many academics have struggled to exploit the learning continuum through technological means for years. It is irrelevant whether or not it is attempted through computer

⁵⁵ Roger Trinquier, *Modern Warfare: A French View of Counterinsurgency*, (London England: Pall Mall Press, 1961), 11.

⁵⁶ Department of the Army, *Field Manual 1, The Army*, (Washington, DC: Government Printing Office, Department of the Army, June 2005), 1-1, quote from T.R. Fehrenbach, *This Kind of War*.

⁵⁷ Sean Naylor, *Not a Good Day to Die: The Untold Story of Operation Anaconda*, (New York: Berkley Books, 2005), 173-4.

simulations, mathematical formulas, or gaming models. Technology can not completely replace human qualities when it comes to intelligence operations; it can only enhance them. Chess experts have attempted for years to produce a computer that can defeat any human. They have been relatively successful with computer creations such as *Deep Blue* and *Deep Fritz* that are capable of making forty to fifty billion calculations of possible moves in a matter of three minutes. Interestingly, these technicians achieved impressive results by ultimately defeating the legendary Gary Kasparov chess grand master in 1996.⁵⁸ Despite these gains of artificial intelligence it can be argued that technology will not be capable of obtaining the equal consciousness of a human being. Here lies the basis of the man and machine debate. Since one requires the understanding of human behavior to fundamentally obtain information from a living and thinking system, then the use of technology, as far as can be predicted, will not ever be able to accomplish the same results as man. The role of both technology and human efforts are important, but it is imperative to maintain a balance between them and to not empower one at the detriment of the other.

SOF is Not the Answer

Prelude to 2002, the general consensus regarding LRSUs was that their conventional deep collection role could be accomplished by SFODAs and strategic human or national level imagery collection assets. However, there is a reversal of this perspective from the SOF vantage supported by a memorandum for record from the Special Operations Command. The memorandum clearly captures the opinion of the Commanding General, U.S. Army Special Operations Command, LTG Kensinger, as “seeing SOF’s core tasks as different from long range tactical reconnaissance or even strategic reconnaissance, and therefore different from LRS role in

⁵⁸ Kasparov website. <http://www.toad.net/~andrews/kaspar.html>, last referenced 22 January, 2006.

support of division and corps intelligence requirements.”⁵⁹ Arguably, the enlightened view that the nation is now involved in a ‘Protracted War’ influences SOF leadership to support the need for a conventional deep ground reconnaissance force. Special Forces (SF) doctrine clearly states that “SF normally will not conduct Direct Action or Special Reconnaissance missions of strategic or operational significance in the corps’ main battle area.”⁶⁰ More specifically, SF doctrine recommends that “whenever appropriate, long range reconnaissance (LRS) units assigned to Army divisions should conduct these missions.”⁶¹ Furthermore, Special Forces maintain nine core tasks and must remain proficient in them. Given the same amount of time to train and when compared to a LRSU that has one core task, it seems obvious that a LRSU has the advantage over a SFODA performing reconnaissance. A possible counter-point to the LRSU’s dominance of reconnaissance is the SFODA’s advantage of equipment and potential means of insertion and extraction. Despite past differences, the Global War on Terror has been very beneficial to conventional reconnaissance units’ MTO&Es and their budgets. The Rapid Fielding Initiative (RFI) concept and the ability to purchase communication equipment and optics off the shelf have been amazing. Technological parity has been achieved between SFODAs and most LRSUs, although mainly within the active component.

Equipment and Training Parity

It is now common for every LRSU team to be equipped with both satellite and secure high frequency capable radios, state of the art infrared (IR) and thermal optics with the ability to capture these images, and hardened computers to facilitate reporting over a tactical internet. All of these technological advances were at one time monopolized only by SFODAs. This is no

⁵⁹ LTG Philip R. Kensinger, Jr., Memorandum for Record, dated 13 October 2005, for acting CAC commander BG John Woods, Subject: USASOC Position on ARSOF in Reconnaissance and Surveillance Support.

⁶⁰ Department of the Army, *Field Manual 3-05.20: Special Forces Operations*, (Washington, DC: Government Printing Office, April 2004), 2-16.

⁶¹ *Ibid.*, 2-16.

longer the case. LRSUs currently possess the very same capabilities to provide situational awareness to their supported commanders as was held by SFODAs in the past. Training proficiency levels and special skills used to be a major obstacle to conventional LRSUs, but not any more. Special training like military free fall (MFF), special patrol insertion and extraction system (SPIES), fast rope insertion and extraction system (FRIES), knowledge of evasion plans of action (EPA), and waterborne insertion techniques are all common within the current LRSU community.

The thirty-three day long Reconnaissance and Surveillance Leader Course (RSLC), based at Fort Benning, Georgia within the Ranger Training Brigade, is the doctrinal proponent for all LRSUs, and the training base for infantry brigade combat team's (IBCT) RSTAs (airborne/air assault/light infantry) in the Army today.⁶² The demand for the RSLC course load in the past two years has exploded and the number of contractors and Army cadre has increased proportionally. Although it has become the primary training base for all of the infantry brigade combat teams' RSTAs, the course remains open to Special Operations personnel, U.S. Marine Corps reconnaissance personnel, U.S. Air Force, U.S. Army personnel from heavy reconnaissance units, and pre-approved foreign allied personnel. This course produces superb reconnaissance operators whose qualities now permeate the entire reconnaissance community. The RSLC cadre train each graduate on the fundamentals of reconnaissance, surveillance (to include sub-surface construction), land navigation, communications, ground imagery collection, static line airborne operations, SPIES, survival techniques, evasion, cache recovery/emplacement, FRIES, vehicle/equipment recognition, tracking/counter-tracking, target interdiction (aerial weapons, indirect fires, or direct fire systems), mounted techniques, and detailed planning for surveillance

⁶² Reconnaissance and Surveillance Leader Course website (http://www-benning.army.mil/RTB/New_LRSC/Commander%20Corner.htm).

and reconnaissance operations.⁶³ Graduates leave the course with a common understanding of deep ground reconnaissance operations.

“What’s in a Name”

Shakespeare’s character Romeo Montague struggled with a similar issue that plagues the Army of today when he asked Juliet “What’s in name? That which we call a rose, by any other word would smell as sweet.”⁶⁴ Romeo is simply saying that ‘names’ are artificial and meaningless conventions. The same is true about what one calls a reconnaissance unit. What truly matters is what that unit actually does. Commonly accepting that “generalizations and deeply ingrained assumptions” come attached to unit titles as part of our mental models.⁶⁵ The title of a Long Range Surveillance Unit more often than not inspires a negative stereotype that many people associate with the name. Through the few decades that LRSUs have existed they have seemingly created a reputation of not producing dynamic results for their supported commander. A perceived cowboy attitude complimented with modified fluff-n-buff uniforms and long sideburns have aggravated even the most open-minded command sergeants major. Considering also the authors’ observations from *On Point* and some of Mr. Gebhardt’s findings in his *Occasional Paper #10* there may be some basis for this truth associated with the negative stereotype.⁶⁶ The question most often raised in the LRSU community is whether or not the training time, budget, and priority of other assets are worth the pay-off. Most of this negative perception was formed from internal causation, but it can be argued that the lack of the proper

⁶³ Ibid., Calendar link.

⁶⁴ William Shakespeare, *eNotes: William Shakespeare*. Ed. Penny Satoris. Seattle: Enotes.com LLC, October 2002. 14 January 2006. <http://www.enotes.com/shakespeare-masters/>, *Romeo and Juliet* (II, ii, 1-2).

⁶⁵ Peter M. Senge, *The Fifth Discipline*, (New York: Doubleday, 1990), 8.

⁶⁶ James F. Gebhardt, *Eyes Behind the Lines: US Army Long Range Reconnaissance and Surveillance Units, Global War on Terrorism Occasional Paper 10*, (Fort Leavenworth, KS: Combat Studies Institute Press, 2005), 160. COL Gregory Fontenot, LTC E. J. Degen, LTC David Tohn, *On Point: The United States Army in Operation Iraqi Freedom*, (Fort Leavenworth, KS: Combat Studies Institute Press, 2004), 163.

external support like funding, training, leadership, and efficient employment had an even greater impact on the LRSU community's unfair labeling. This is why the future title of a division and corps deep reconnaissance unit must be considered for change as well as the organizational structure. Although it is good for the esprit of a unit to be able to draw pride from its lineage, this is a good case where the current title needs refinement. It would however be wise to continue the value of the historic contributions of LRRP and LRSU organizations, but the label of the future deep reconnaissance organizations should be associated with something more receptive.

In order to consider the future conception of a deep ground reconnaissance unit, one must take into account the elite LRSU lineage, the well established proponency training by RSLC, and the LRSU's benefit over a SFODA. Undeniably, the future reconnaissance force structure has a good start point with a LRSU foundation, but it will need some refinement.

SPARTANS UNITE

Refinement of the Current LRSU Force Structure

The concept of consolidation to achieve strength can be seen through many examples, whether one accepts the animal intuitive ability to congregate into a herd for protection or the endless military examples of strength in numbers to mass combat power. In 480 BC, the Spartans at the cliffs of Thermopylae are likely the most inspiring and tragic military example of effective consolidation and massing. The consolidated defensive effort of three hundred Spartan warriors at a narrow pass achieved a critical stalling effect and nearly outright defeated the overwhelming 20,000 Persians. This example of the Spartans is not only a lesson in tactics, but of how a unification effort can inspire resounding second order effects. In this case the Spartans heroic stand at the hot springs inspirationally set the conditions for the remainder of the Greek states to eventually defeat the Persian invasion of Xerxes and save Greece. An analogy exists between the LRSUs of today and the valiant efforts of the sons of Lakedaemon. The similarity is in the necessity to consolidate so to enable tremendous results. In order for LRSUs to produce heroic

results for intelligence collection they first must be properly structured. The most efficient structure for the LRSUs is to bring them all under one headquarters. Undeniably, this action will be the catalyst for multiple positive outcomes. Combining all of the LRSUs into one command will finally provide the much heralded role of the Chief of Recon for a division or corps. The person that assumes this role has been debated for decades. In the past it would commonly defer to the G/J3 or the G/J2. This individual responsible for synchronizing the reconnaissance efforts was personality dependent, yet never solidified in doctrine. The importance of this role is critical to many topics since the Chief's performance results in life or death scenarios. Yet he will also bring a new leadership dimension to reconnaissance at not just the tactical level, but potentially the operational and strategic depending on the collection emphasis. A permanent Chief of Recon will ensure that the LRSU teams are used properly and at the most acceptable risk level. Proper employment of teams also implies that they are sufficiently educated, equipped, specially trained, and mentored. A central figure would thus be capable of fighting for the latest and most dependable equipment for their Soldiers and ensuring that they receive the most demanding individual and equipment training. As Leonidas, the Spartan king, provided leadership for the Lakedaemon foot soldiers, so will a Chief of Recon provide for future LRSU or deep ground reconnaissance Soldiers.

Improved Leadership and Selection

The current structure of the LRSU does not facilitate the necessary experienced leadership. Leadership is lacking at both the battalion and company (or detachment) level. All LRSUs are subordinate to military intelligence battalions. These battalions are commanded by board selected intelligence officers who on average has never led, supervised, or participated in any previous LRSU training or operations. The norm is that the commander's experience is moderate to shallow. This situation is unsatisfactory for an environment that entails severely high risk performance by the subordinate LRSU team members.

Another leadership fault with in this system is the knowledge base of the company or detachment commander. At best he is a capable, intelligent, and motivated officer, only of the rank of captain, who has already proven himself in command of an infantry rifle company. Unfortunately, these qualities only provide limited exposure to reconnaissance operations. The possibility of a LRSU commander having previous intelligence, surveillance and reconnaissance (ISR) experience is minimal simply because of the limited amount of LRSU positions that are available to a lieutenant in the Army.⁶⁷ Consequently, the captain with limited experience is expected to provide advice to his battalion level superiors on how to properly employ the teams. Why would the Army treat such a risky and important operation like reconnaissance to an inexperienced leader? The answer is not because of unsympathetic doctrine, but because of an uninformed one. This problem can be fixed. The Chief of Recon, as the higher echelon commander of LRSUs, will finally provide that missing ingredient of experienced mentorship. He will be capable of mentoring the detachment or company commander on all levels of LRSU supervision, through sufficient quarterly training briefs, weekly training meetings, and daily training events. This mentorship can be accomplished in various ways and is not limited to face to face interaction, but can also be conducted through video teleconferences, phone traffic, or email functions. It is essential that an experienced individual fills this leadership role. Actions that were non-existent in the past will now be possible with seasoned leaders in the deep ground reconnaissance ranks.

Leadership is the most dynamic element of combat power and essential in facilitating education within an organization. Carl von Clausewitz's experience within the regiment of

⁶⁷ RSLC website: there are only eight active component LRSD/C and ten reserve component LRSD/C. Considering that there is only one lieutenant position in a LRSD (XO), only four positions in a LRSC (PLs and XO), and one non-branch qualified position (OPS Officer) there is only a population of a total of approximately 16 officers and 18 officers every 12-18 months available with LRS experience. These numbers also do not take into account the retention of these officers in the service or in the infantry field.

Prussian Prince Frederick from 1796-1801 is one of the best models of unit level education in history. During Clausewitz's five years in the village of Neuruppin he developed an inspiration to instruct and learn within one of the "Prussian Army's most innovative and educational policies, financed largely by the officers themselves."⁶⁸ The U.S. Army needs to reinvigorate this model of education at the unit level and resurrect a contemporary Prussian example of a Black Eagle University.⁶⁹

It is easy to recognize that the most influential person in a unit to provide education is the commander. Who better to establish a climate that fosters learning and inspire creativity? The commander can ensure time and resources are allotted to support valuable education. The Army education system, despite its well intentioned purpose, is limited in scope. Typically the institutional Army is only able to educate at a common denominator and usually is unable to achieve any true specialization. A more in-depth education process can occur at the unit level inspired by both command and peer influence. LRSUs ideally require internal specialized education, selection, and training. This learning environment requires not only a certain type of leader, but a unique follower as well.

It is important that future deep ground reconnaissance units perform a selection process to entice the select few. Most legacy LRSUs operate a selection and assessment process to fill their ranks. This process attempts to find the right type of Soldier to serve in a deep reconnaissance unit where "extreme circumstances require more than extraordinary physical capabilities—it also requires specific character traits."⁷⁰ To maintain a selection process requires divisional and corps command support that provides persuasion authority to conduct intra and

⁶⁸ Peter Paret, Introductory Essay, *Carl von Clausewitz: On War*, (Princeton, NJ: Princeton University Press, 1976), 8.

⁶⁹ Black Eagle was the national symbol of the Prussian government.

⁷⁰ Department of the Army, *Field Manual 3-55.93 (Draft): Long Range Surveillance Unit Operations*, (Washington, DC: Government Printing Office, 02 JUN 2004), Appendix A-1: Personnel Recruitment, Assessment, and Selection.

inter-post transfers of individuals. This process can become difficult and upsetting to the losing unit leadership, but can be appeased when the gaining LRSU provides superb support in return to that sending unit. It is easy to categorize differences in the current LRSUs based on their selection criteria. The LRSUs that possess reduced standards for acceptance into their organization, or none at all, generally earn reputations that display a lack of discipline, reduced special skills, and unreliability.⁷¹ Every future LRSU needs to maintain a selection and assessment process that evaluates the physical and cognitive qualities of a candidate. The physical screening should focus on endurance related events with heavy Soldier loads, but not be the main selection criteria. Physical attributes can always be improved with the proper effort, but the aptitude for learning is the far more valuable trait. An applicable screening of cognitive qualities would best be focused on general intelligence, memory skills, emotional stability and personal morality. Other key components to a successful selection process include recommendations from the Soldiers' commanders, a final board to centrally review all candidates, and a probation period. In order to maintain any substance behind a selection process, the LRSU must maintain a command release authority, aside from the Uniform Code of Military Justice, to maintain good order and discipline in the unit. Once a LRSU is filled with the right kind of Soldier the more difficult task of properly training and educating must begin. To fully reach the potential of a LRSU's capabilities, many refinements must be addressed in these areas.

Mobility

If we train for what we know and educate for what we do not know, then the future LRSUs need to increase their mobility and lethality and explore new educational techniques. Similarly they must inculcate a climate that prioritizes the education of cultural awareness, instant

⁷¹ Observations from 26 months in command of the Reconnaissance and Surveillance Leader Course (RSLC) from 2002 to 2004 and 14 months in command of XVIII Abn Corps LRSC from 2001-2002. During my command tenure, I had personal interaction with every LRSU in the Army and was able to form opinions on this interaction. The RSLC is the proponent for all LRSUs in the Army.

analysis, and risk control. Stealthy reconnaissance usually implies the restrictions of dismounted movement and limited additional equipment. Yet there can be a compromise that both increases flexibility while maintaining the methodology of undetected operations. The most common limitations of LRSUs are their lack of flexibility after initial insertion. In order to re-locate a team it takes time and extra resources, of which is not a common luxury during missions. There is a solution. A LRSU team can achieve this balance with the proper mentality and equipment. Flexibility begins in the cognitive form. A mental shift must take place in the LRSU community that accepts and embraces change which typically is regarded in a very negative fashion from its members. Historically a fragmentary order to change NAIs was synonymous with an end of mission order. LRSU team members must now be willing to displace to a new location once originally inserted and more importantly 'to expect it'. To facilitate such a new paradigm one must address the equipment that supports this mental flexibility. Reliable secure communications and ruggedized personal computers are common in today's technology industry. Both will provide the conduit to send and receive fragmentary orders that dictate new locations for deployed teams. Legacy communication equipment limited the transmitting of mass data such as terrain imagery and detailed orders.

Although equipment and mindsets achieve flexibility, they only offer part of the solution to this aim. All-terrain vehicles (ATV) and Highly Mobile Multiple Wheeled Vehicles (HMMWV) are platforms that enable mobility for a LRSU team that did not previously exist in a legacy MTO&E. Both types of vehicle platforms can be loaded into certain rotary wing aircraft and be inserted deep into the battlespace. Once on the ground they will provide a platform for continuous infiltration based on METT-C considerations. Arguably the ATV will be much easier to conceal, but provides less payload capability. Greater payload advantages directly effect increased mission duration also. Moreover, this option will provide the ability to carry more supplies for sustainment, like water, food, ammunition and batteries. Extra supplies are typically colossal hindrances to mission duration because of the additional weight they add to the Soldiers'

load and the negative affect on movement rates and individual endurance.⁷² These all-terrain platforms can also provide a previously unknown and very delicate solution to self-extraction for medical emergencies or evasion.

Historically medical and other emergency extractions have always been the most significant weakness of every LRSU mission. An emergency extraction would entail valuable aircraft resources that were invariably identified for other uses and potentially a poor use of a limited asset. This emergency extraction dilemma has also contributed to the reluctance of mission-execution acceptance by commanders and most often remained the sole reason for mission cancellation. Mobility for LRSUs will enable more than just flexible cognitive attitudes, but potential diversity with LRSU team operations not previously performed.

Another benefit of increased mobility is the option to mutually support adjacent teams and provide over watch of a maneuvering reconnaissance element. Mutually supporting LRSU teams was considered heresy by previous logic. Isolation for planning purposes enforced complete secrecy and blocked knowledge sharing between teams prior to mission execution. This concept was based on force protection and security measures so that a compromised or captured team could not give up sensitive information about another employed team. This line of thought is ludicrous and outdated. Isolating information from internal adjacent units reduces a team's options and places security as the number one priority instead of reporting information. Future coordination between teams may facilitate a technique that plans for reinforcements in an emergency break contact situation or provide assistance in an emergency extraction situation. Most importantly, previous synchronization between teams can enable a mutually supporting over watch concept. Not only can this concept add to force protection of a team, but it can also create improved intelligence collection. Imagine a LRSU team entering a village to conduct an overt

⁷² Average LRSU Soldier's load for a mission rucksack can be as much as 100-120 pounds. Water, ammunition, and batteries are usually the bulk of the weight.

area reconnaissance while an additional team maintains a mutually supporting over watch position. The team in over watch could gain decisive information by observing the habitants' reactions to the overt actions of the other team. Do the habitants immediately exit the village from the rear, with certain types of weapons, or do they react with passive ambiguity? The perspective of two teams can inform a much different situational understanding than just one. This concept of mutual support is similar to that of a bounding over watch movement technique, but with a collection emphasis and secondary purpose of security. In order for this overwatch technique to be efficient, the teams must be equipped with weapon systems that can range potential threats. This is another new view within the LRSU community because it involves increased lethality.

Lethality

The most casualty producing weapon in the current LRSU inventory is the claymore M18A1 anti-personnel mine and its' purpose is a defensive close-in measure and reactive in nature. The mentality of engaging the enemy in self-defense instead of pro-actively is hard set in historic LRSU mindset. New weapons systems with increased range and noise suppression countermeasures are readily available in the Army inventory. Introduction of the more lethal long range systems will provide a LRSU team with many more options of force protection and target interdiction. Sniper systems like the M24, SR25 (both 7.62 x 51mm), M 110 (semi-automatic 7.62 x 51mm), and M107 (.50 caliber), could be invaluable to security and flexibility for the team.⁷³

When one considers the under-exploited role of sensor to shooter relevant to a LRSUs' placement on the battlefield, it causes frustration. There are occasions when it becomes more important to the overall operation to destroy a target on the NAI, rather than just observe it. This

⁷³ RSLC website, Commander's Corner, recent improvements to the Program of Instruction (POI), last visited 13 FEB 06. https://www.benning.army.mil/rtb/new_lrsc/Commander%20Corner.htm.

is especially true when one considers the current operating environment where individual personnel, instead of tank formations and artillery groups, have become high value targets. A LRSU's mission can quickly adapt from a purely passive collection task to target interdiction as was the case on 01 March 2002 in the Shahikot Valley in Afghanistan.⁷⁴

The increase in a team's lethality can also have great effects on force protection. It appears more suitable that a team member engages a valid threat that may compromise the team's position at the farthest distance possible. In an open-terrain or mountainous environment a weapon's range becomes even more crucial. Weapons with greater reach also provide a LRSU team that is breaking contact increased opportunities to hinder an advancing enemy at the greatest possible range. The improved fire power may well dissuade the enemy's desire to even continue their pursuit. Passive camouflage techniques and superb discipline are not full proof. Therefore, a break contact situation is eventually inevitable and implies that all else has failed with security measures. Periodically, a sensor must become a shooter and when that role emerges, time is of the utmost importance.

When a LRSU team is tasked with performing target acquisition or target interdiction they must be properly equipped and trained. Part of this training must be techniques for improving the sensor to shooter response time. Unfortunately 'acquisition' and 'interdiction' are mission essential tasks for only some of the current LRSUs. These tasks need to be standardized and incorporated into all of the LRSUs. A consolidation of all LRSUs can ensure a critical common METL. Providing units with master close air support (CAS) trainers is the first step to METL proficiency. The close air support struggle is a sensitive issue with the Air Force and their desire to maintain control over all tactical air controllers. Undeniably, the Air Force has performed exceptionally well in recent operations in regards to supplying lethal doses of CAS,

⁷⁴ Sean Naylor, *Not a Good Day to Die: The Untold Story of Operation Anaconda*, (New York: Berkley Books, 2005, 173-4.

but there just are not enough trained tactical air controllers to fill the Army requirements. CAS is not the only means of executing target interdiction and acquisition. The target acquisition task is solely to acquire a target for another platform to facilitate a fire mission.⁷⁵ Acquiring can be accomplished by painting a target with a laser target designator, like the AN/PEQ-1, Special Operation Force Laser Marker (SOFLAM), or by marking it with a ground commander pointer (GCP), smoke, or simply with stated grid coordinates.⁷⁶ The team is simply notifying the killing platform, where to do the killing. This platform can be anything from CAS, indirect fire, or direct fire coming from the LRSU team itself. The sensor to shooter role is possibly the most under-exploited LRSU capability on the battlefield today. Strict adherence to passive collection and lack of proper technical equipment is no longer tolerable as an excuse for not doing this task well. With assistance future teams can break the paradigm of the under-exploited sensor to shooter role. The legacy mindset can easily be transformed by obtaining standardized and sufficiently funded equipment. However this equipment must be complimented at the unit level with proper training and leadership with employment experience. Inclusive with the new role of lethality are the complexities of making life-ending decisions. Placing an increased lethality mission on the LRSU teams must be balanced with the maturity, training, and mission understanding to handle such situations.

Education

Maturity implies more than the shallow perception of rank and time in service, but a certain innate demeanor which can be influenced by genealogy and education. After the selection and assessment process has adequately matriculated the proper type of soldier into the LRSU, the education process then begins. Educating properly can be time consuming and difficult to

⁷⁵ Department of the Army, *FM 3-55.93 (Draft): Long Range Surveillance Operations*, (Washington, DC: Government Printing Office, 2004), 4-40.

⁷⁶ *Ibid.*, 4-41.

balance with proficiency training. If one were to focus all of their time on improving rifle marksmanship, and not balance their schedule with education on how to maneuver and properly select cover, it could be argued that the marksmanship training was fruitless. LRSUs struggle with a similar concept constantly. Despite the multiple types of equipment, weapons, and insertion skills that are required within such an organization, if the LRSU is not adversely approaching individual learning with the same vigor, they will remain only partially proficient. The education process for a deep ground reconnaissance unit should emphasize three key topics: near-instant analysis procedures, awareness of culture, and risk acceptance.

The current methodology of a LRSU team's collection process is to report the facts only.⁷⁷ Analysts at division and corps will conduct the synthesis later with supplementary data and in the proper rear-echeloned environment. This concept is based on the premise that only a school trained military intelligence analyst can determine the relevance of the LRSU team's combat information. Not only is this line of logic feeble, but counterproductive towards allowing the commander on the ground to act more rapidly and to quickly improve the common operating picture.

One can argue that a LRSU team can be educated to conduct near-instant analysis. First a set of pre-conditions must be established for this process to be successful. The team members must be well versed in the current culture which they are operating in, to include language skills, customs, clothing, and religious beliefs. Secondly, the team members must possess in-depth knowledge of the threats equipment, military doctrinal actions, and the enemy's purpose. Lastly, the team members must be capable of conversing intra-team and externally with the company headquarters with text or voice. The team members will then be capable of duplicating a process similar to retired Israeli Brigadier General Shimon Naveh's systemic operational design (SOD)

⁷⁷ Department of the Army, *FM 7-93: Long Range Surveillance Operations*, (Washington, DC: Government Printing Office, 1995), 1-7.

concept of informed discourse by “applying the theory of general systems to the field of military operations.”⁷⁸ Recognizing that Naveh’s operational design theory is an ongoing discourse that attempts to achieve synthesis through lengthy discussions, it can provide relative value in certain tactical scenarios. The specific value is in the replication and embracing of the “cognitive process to adapt to changing situations.”⁷⁹

Armed with cultural knowledge, situational template understandings, and an avenue for discourse, LRSU teams will be even more influential on the battlefield. An individual’s intuition can be powerful. Dr. Gary Klein states that “it depends on the use of experience to recognize key patterns that indicate the dynamics of the situation.”⁸⁰ He goes further with an offered theory described as the Recognition Primed Decision Model.⁸¹ This theory however only offers limited value to near-instant analysis. The model provides a construct where acquired feelings are recognized to be based on past experiences. One must accept however that this intuition aids only in instigating the initial SOD-like discourse between the team and higher. Therefore it ultimately only moderately contributes to the sought after synthesis of near-instant analysis. Arguably, the synthesis will subsequently be achieved with internal and external reconnaissance team discourse. Although this discourse may take some time (how much is situational dependent), it is being conducted with ‘human eyes’ on the target and not at some distant location. Problems may occur however if one considers Dietrich Dorner’s views on making false assumptions. “Complexity, intra-transparency, internal dynamics, and incomplete or incorrect understanding of the system” are characteristics that can prevent one from seeing the truth.⁸² Regardless, the chances of such a negative outcome are outweighed by the benefits of on-site

⁷⁸ Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, (London, England: Frank Cass Publishers, 1997), 4.

⁷⁹ Shimon Naveh, lecture notes, (28 JAN 2006).

⁸⁰ Gary Klein, *Source of Power*, (Cambridge, Massachusetts: MIT Press, 2001), 31.

⁸¹ Ibid, 24.

⁸² Dietrich Dorner, *Logic of Failure*, (New York: Metropolitan Books, 1989), 37.

analysis, determined by educated, experienced, and informed team members synthesizing with their immediate supervisor. Understandably, an informed discourse is invaluable to achieving better resolution and an improved common operating picture for the commander. In light of this necessary time for discussion, it is accurate to label this type of analysis as ‘near-instant analysis.’ This on-site analysis can be considered a much better way of supplying commanders with timely actionable intelligence. Near-instant analysis aids in the timeliness and accuracy of intelligence, but can only be accomplished with a broad knowledge base which includes cultural awareness.

Cultural education can be accomplished inside a consolidated LRSU with the same enthusiasm as in SFODAs. The LRSU commander can now have the option to specialize certain teams regionally. Results of such a move could produce something similar to when MG Scales offered “Cultural Scouts” for the conventional force.⁸³ An in-depth knowledge of culture offers more than just language skills, but more importantly it may facilitate the ability to predict. If a team understands the ‘why’ of how a certain people act, then one can start predicting future actions based on observations. This knowledge will not only assist in intelligence collection and analysis, but in force protection of the LRSU team also, by providing insight into surveillance site selection, counter-tracking procedures, and clarification of threatening gestures. Although the U.S. Army may not have the ability to send its conventional members off to distant lands as the British Empire did and immerse their men, like T.E. Lawrence, in other cultures, it can however strive for the same immersion result through other means. There are new virtual training aids that enable a Soldier to deal with many different types of indigenous behaviors, like the Enhanced Learning Environment with Creative Technologies (ELECT) and Explainable Artificial Intelligence (XAI) simulations.⁸⁴ Just a mouse click away also exist a conduit for language

⁸³ MG Robert H. Scales, *Culture-Centric Warfare, Proceedings Magazine*, (<http://www.usni.org/proceedings/procurrenttoc.htm>: US Naval Institute, September 2004), 1.

⁸⁴ Institute for Creative Technologies, <http://www.ict.usc.edu/content/view/60/114/>, last reference 13 FEB 06.

training on Army Knowledge On-line, facilitated by professional and proven language specialist such as Rosetta Stone. Meanwhile the Center for Army Lessons Learned (CALL) and the U.S. Army Special Warfare School are a wealth of cultural knowledge for any type of observations and lessons learned from our most recent combat operations. There is no reason that all LRSU members can not be well versed in any future cultural environment in which they might be employed. Moreover, it is possible with the proper emphasis to maintain a unit led education program that focuses on customs, language, behaviors, and religious beliefs. Cultural education will not just facilitate a well understood common operating picture for a division or corps, but it will also aid in mitigating risks to the participating team and the mission.

Understanding and controlling mission risks should also be a critical part of the future deep ground reconnaissance unit level education process. This topic has typically been the most significant hindrance to mission approval. This obstacle is mostly attributed to poor intrapersonal skills at the company echelon and a leader inability to inform the higher command of adequate risk countermeasures. It can be very frustrating for LRSU teams to expend all energies toward mission preparation, only to see it thwarted because of a commander's inability to assume risk. Accepting risk is the most demanding burden placed on the Army's commanders in the formations today. In regards to LRSU missions, this is especially noteworthy, since mission depth and lack of combat power are always an issue with emergency extraction. Tools that can assist in presenting risk mitigation to higher are already available in the draft *FM 3-55.93 (Draft) Long Range Surveillance Operations*, in the "Conditions Check" brief.⁸⁵ Fortunately, there are many avenues for which to pursue risk reduction for LRSU missions. Most concepts are already in use with some deep ground reconnaissance units and have been validated in recent combat environments. Some have already been mentioned but will be re-stated to clarify their value to

⁸⁵ Department of the Army, *FM 3-55.93, (Draft): Long Range Surveillance Operations*, (Washington DC: Government Printing Office, 2004), Appendix B.

risk management. Mobility incorporated to the team level through the use of vehicles, enables an internal quick reaction force (QRF) and internally medically evacuation its' Soldiers from as low as the platoon level. These mounted platforms can also support increased fire power such as .50 caliber weapon systems, MK-19 grenade launchers, or Javelins which can prevent LRSUs from being overmatched in chance engagements even with armored forces. Combat power does not stop at the team and platoon level, but can be increased with the assistance of a joints fire contributing to the relevant area of operations. After education, nothing is more decisive in gaining initiative for a LRSU team in contact than the introduction of indirect fire or CAS to the situation.

Improved education also will provide adaptive intellects that will be slow to over-react to misinterpreted indigenous behaviors. This highly educated LRSU operator will become a more mature decision maker who influences risk in every aspect of the team. Also, medical training can manage risk levels by ensuring every member of the team is emergency medical technician (EMT) qualified or at a minimum combat life-saver (CLS) qualified. Finally, risk can be greatly reduced with adequate equipment. The latest communications equipment is both secure and very user friendly. Archaic equipment no longer haunts LRSUs. The days of reliance on antenna theory and knowledge of wave propagation have ended with the availability of new HF, VHF, and SATCOM systems. The current HF systems provide automatic link establishment (ALE), low probability intercept and detection (LPI/LPD) and SATCOM radios assist with larger bandwidth data transmissions from an enlarged satellite constellation.⁸⁶ All of these technological advancements prevent such circumstances that plagued the former LRSUs with strict adherence to communication windows and emergency contingencies for failing to meet them. Such troubling situations, involving missed communication windows, burdened the VII Corps LRSU in the 1991 Operation Desert Storm and forced unnecessary emergency extraction

⁸⁶ Ibid., 6-30-6-34.

situations and allocations of precious resources.⁸⁷ A future concept of unified LRSUs will ensure that adequate equipment and training proficiency are a preventable measure for such situations to occur again.

If the U.S. Army follows the Spartan's example for a consolidated LRSU organization structure in support of the division and corps, one will see phenomenal results. The effects of a unified structure will have a multitude of positive results and indirectly impact the force as a whole. The ultimate combat-multiplying consequences of improved leadership, higher education, updated equipment, and acceptable risk management will be difficult to dismiss. More importantly, the undeniable outcome will positively enhance the future of conflict for the U.S. Army.

CONCLUSIONS AND RECOMMENDATIONS

The importance of reconnaissance for a fighting force is like that of oxygen for the brain. Both may live without one another, but only for a very short period of time. Both the military force and the mind will cease to work if denied their metaphoric necessities. Reconnaissance is undeniably necessary for future full spectrum operations and “without [it], our joint forces will lose the essential advantages of surprise, operational security, and flexibility.”⁸⁸ Reconnaissance is essential for a BCT so therefore it must be essential for a division and corps level headquarters also. Yet, the BCT reconnaissance assets can not be expected to perform both intelligence collection for the brigade and higher echelons. Arguably, there remain ‘gaps’ within the battlespace of a division or corps (TF or JTF) area of operations. As one considers the current and foreseeable future global threat, it is even more apparent how essential human qualities will be in the information dimension. As best predicted, small wars and formless enemies will be the

⁸⁷ James F. Gebhardt, *Eyes Behind the Lines: US Army Long Range Reconnaissance and Surveillance Units, Global War on Terrorism Occasional Paper 10*, (Fort Leavenworth, KS: Combat Studies Institute Press, 2005), 128.

⁸⁸ GEN Hugh H. Shelton, *Joint Publication 2-0*, (Washington, DC: Government Printing Office, 2000), Forward.

most common challenge. Technology will enable a more rapid distribution of intelligence, improved tools for planning, and even greater lethality on the battlefield. However, it will never replace the capabilities of human senses, especially when it comes to gathering information in the contemporary operating environment and potential future asymmetrical conflicts. The reliance of human sensors on the ground will be the most effective approach to gaining intelligence for commanders because of the human senses and the ability to judge behavior. A machine, whether it is a UAV, a joint surveillance targeting attack radar system (JSTARS), or a satellite, just can't replicate certain human attributes. If a division or corps is going to successfully obtain enemy information in the future environment, it will need to retain a human collection capability to gather information within its battlespace. Defining this area for a division or corps is difficult to quantify with measurable map distances, although it was attempted with legacy doctrine. It can however be defined by measurable distances in a linear area of operations, but in a non-contiguous battlefield the distance may only be a few kilometers from the division operating base. In light of this, a division or corps may need information that is 150 kilometers away and ultimately exceed the range for a BCT's reconnaissance element. However one must agree that the critical importance to a unit's intelligence collection plan is not the distance to the target, but the 'type' of information it needs. Therefore the term deep ground reconnaissance is more relative to the higher tiered headquarters it works for, versus the distance it can cover.

If information dominance is an aim at the division or corps level to achieve success then the Army must consider what current assets can help achieve this aim. The closest capability we have to successfully performing deep ground reconnaissance is a LRSU. However, after researching its lineage, history and combat effectiveness in some of the U.S. Army's most recent engagements, it is apparent that the LRSU concept is not entirely living up to its potential. How can this be? The LRSU community is a reputed elite asset for the conventional force that is comprised of dedicated and specially trained individuals. Unfortunately, the problem lies within

the organizational structure. If one can rectify this dilemma, then possibilities for deep ground reconnaissance units, like LRSUs, are endless.

Consolidation = Standardization

The reason the LRSU community lacks efficiency is because it is decentralized. Every LRSU is a detachment or company size element subordinate to a military intelligence battalion, all within different corps and divisions. This organizational structure prevents any standardization within the community. For example, if the XVIII airborne corps was to receive a non-habitual LRSU to support its intelligence collection plan, it can not expect this new LRSU to be capable of the same skills as its habitual company. Unfortunately, not every LRSU maintains the same proficiency levels because of different command environments, budgets, geographic locations and recruiting base. These conditions affect everything from a LRSU's mission essential task list, MTO&E, and their insertion/extraction capabilities. Aside from the standardization quandary, the LRSU community also suffers from negative stereotyping. These generalizations are in part influenced by company and battalion level leadership that is inexperienced with the unique risk management issues of a LRSU. The lack of inadequate mentorship perpetuates the improper use of a LRSU, thereby contributing further towards the perception of ineffectiveness. Despite these flaws, LRSUs have much to offer as a foundation for deep ground reconnaissance. Clearly the habitual traits of a passive-collection mentality, detailed planning practices, special training skills, and an unmatched esprit provide an invaluable basis for such a unit. Other added values of LRSUs are their ability to operate in urban or terrain restricted areas and their resilience to weather effects that hinder other types of collectors. LRSUs are truly the all-weather-all-thinking collectors and undeniably an integral part of the future of deep ground reconnaissance.

Scout Brigade

Although the Long Range Surveillance title has brought pride to many individuals, the name continues to derive many negative generalizations. Although the new reconnaissance units for divisions and corps will essentially be made up of the former LRSUs, they must however adopt a new name. This new name must be one that can transcend both the infantry and cavalry/armor parochialisms. The only title that both branches consider in a positive light is the term 'scout'. Both armor and infantry units hold their scout platoons in high regard. Therefore, since the future of deep ground reconnaissance is a unit that will support both communities, the title of 'Scout Brigade' may serve it well. This new name will suffice for both division and corps level missions too. If they are supporting a division they are then referred to as 'division scouts' and 'corps scouts' respectively. Just like a 'battalion scout', the type of scout derives his identity from the echelon that it supports. Considering this logic, it makes sense to also refer to the current RSTAs Soldiers as 'brigade scouts'.

There are solutions that can achieve a very productive and adaptive deep ground reconnaissance organization. A unification of all LRSUs in the Army will provide the initial remedy for improved intelligence collection at divisions and corps. Clearly, the first step in the process is to unite all of the separate LRSUs under one headquarters. This new headquarters should be a brigade-size element, but maintain historic LRSU regimental affiliations such as the 51st and the 52nd Infantry Regiments. The ideal configuration for this brigade would comprise of four battalions, three active component (AC) headquarters and one a reserve component

headquarters (RC). (see Figure 3)

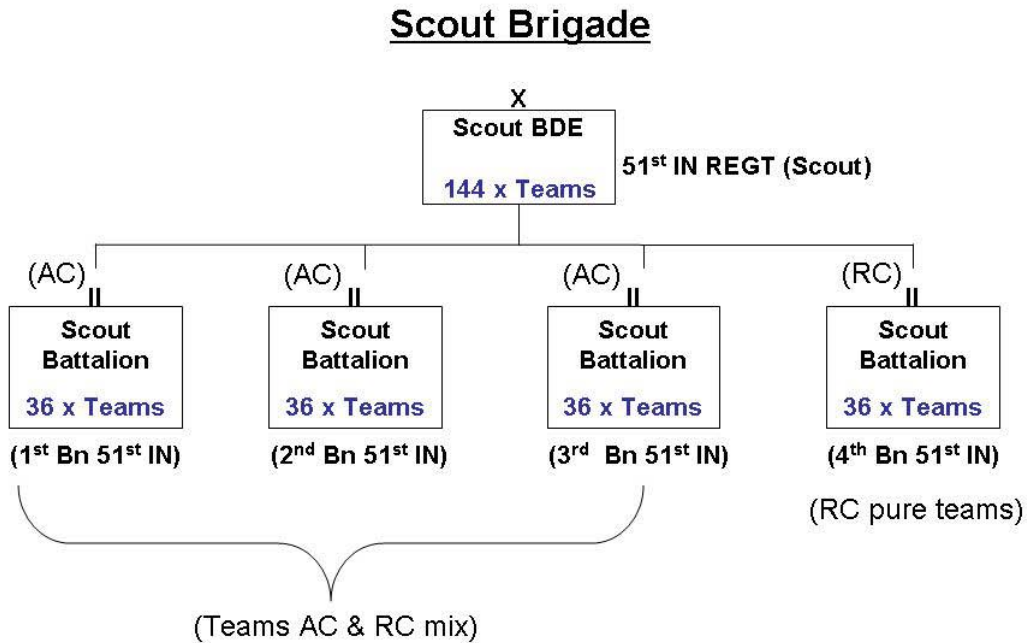


Figure 3: Recommended Scout Brigade organization structure

All of the manpower of this brigade will be created from the legacy LRSU personnel. No part of the TO&E will be resourced from external manpower sources. This solution is simply a re-distribution of individuals within the LRSU community. Subsequent in the consolidation process is the need to delete the title of Long Range Surveillance and any reference to detachments. The delineation between what exactly a LRS detachment and a LRS company 'is' has commonly been misunderstood by most of the Army population. Maintaining one single unit identification will simplify matters. These new battalion sized organizations must be comprised of 'companies' not detachments. The title of company also implies the existence of an E-8 First Sergeant where as a detachment only warrants an E-7 Detachment Sergeant. An accumulation of all the LRSU teams in the Army equates to a total of seventy-two AC teams and eighty-four RC teams.⁸⁹ These numbers enable a mathematical solution of thirty-six teams per battalion. Moreover, this battalion structure will provide a unique AC and RC balance. This AC and RC habitual

⁸⁹ RSLC website. There are 2 x LRSC (36 x teams) and 6 x LRSD (36 x teams) in the active component Army. There are 2 x LRSC (36 x teams) and 8 x LRSD (48 x teams) in the reserve component.

combination will invaluablely contribute to a solution for the perpetual problem of integrating these components. The subordinate company make-up will provide a sound foundation for these battalions. These companies will consist of eight AC teams and four RC teams of scouts with six men each. (see Figure 4)

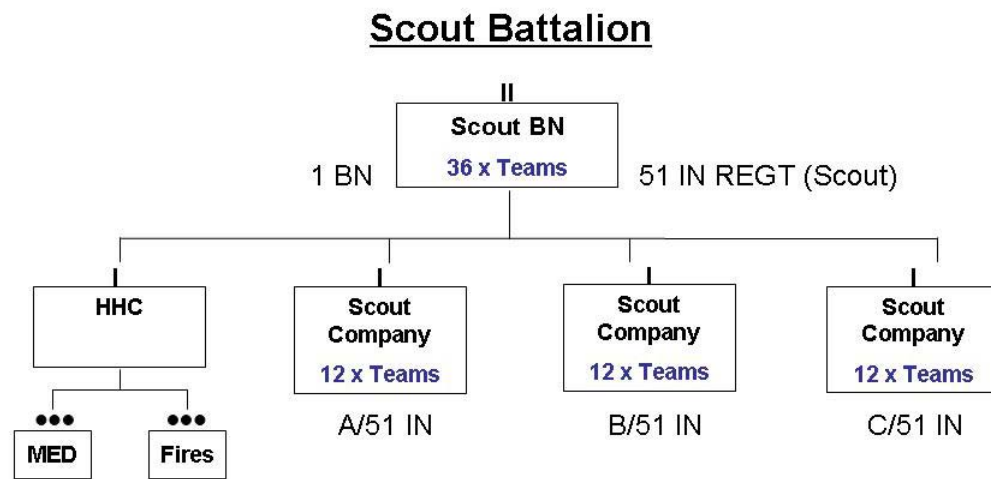


Figure 4: Recommended Scout Battalion organization structure

The one RC battalion will consist of pure RC comprised companies of twelve teams each. The rationale for the change in the number of teams can best be explained through the example of an insufficient number within a legacy LRS detachment and its resulting limitations in area coverage. Six teams do not provide enough flexibility. Moreover, the personnel total of under ninety individuals does not meet the Army requisites of a company. Never the less, a legacy LRS company consisting of eighteen teams was too great a number for the acceptable span of control for the company commander.⁹⁰ Twelve teams per company is a more suitable balance. The construct of twelve teams also facilitates a workable battle rhythm of one-third of the teams out collecting, one-third planning, and one-third refitting at any given time. (see Figure 5)

⁹⁰ Personal observations from command of a LRSC. If all eighteen teams were employed at any given time it became nearly unmanageable. Considering the battle tracking and requirements for the commander to be present for the multiple doctrinally mandatory team Briefbacks and Mission Concept Briefs (MICON).

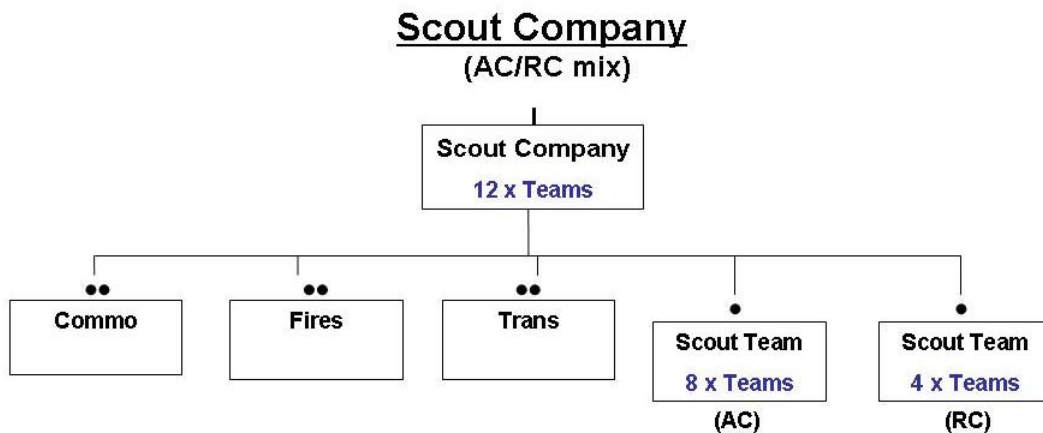


Figure 5: Recommended Scout Company organization structure

Ideally, this concept also fosters an AC and RC relationship down at the company level. A permanent command relationship is thus established, which places the responsibility of the unit proficiency, for both the AC and RC elements, squarely on the commander's shoulders. Quite clearly, this is also an ideal way for unit experience to stay within the community while supporting individuals who choose to not continue on in the active component side of the force, but in the reserves. Most notably, these teams will operate with the same methodology of LRSU teams, but with major improvements such as standardized equipment and mobility.

Standardized TO&E

A common and standardized name must imply that the same holds true with their equipment and internal organization structure. The TO&E of a division and corps scouts should include effective radios for their internal and external communications. Possessing HF and SATCOM radio systems are essential for a primary and alternate means for external reporting. Currently the best systems are the PRC-150 (1.6 to 60 megahertz) for HF/VHF reporting and the PRC-117 (20 to 512 megahertz) for SATCOM procedures. Both are secure and dependable. Internally, there is a need for a dependable, lightweight, and secure system also. The best radio for this role is the PRC-148 multi-band intra team radio (MBITR); which operates between 20

and 512 megahertz bandwidth. This ensures that a team can securely interface with aircraft and SINGAR systems from their observation position. Another essential item to facilitate improved reporting procedures is a ruggedized laptop computer. Laptop technology changes frequently, but the initial one integrated for field use was the *Panasonic Toughbook* (CF-18 or CF-M48). These ruggedized computers enable the employed team to send and receive valuable data. They are ideal for receipt of a fragmentary order or sending imagery that supports 'actionable intelligence' for a maneuver element.

If a team is unable to actually see the NAI, then it is useless. Scopes and night optics must be common to all teams. There are invaluable kits that include digital cameras spotting scopes with 60mm diameter objective lens, adapters for the camera and night vision goggles, 5590 battery adapters, and memory sticks. These kits, such as the *TSE-LRSD-18-Kit* must be mandatory for the unit also. Acknowledging that seeing and reporting information is the primary concern for the scout unit, other equipment to facilitate improved lethality and mobility must be included with the standard TO&E.

The scout team must maintain four wheel drive all-terrain vehicles (ATV) and HMMWV platforms for mobility. The ATV option enables more stealth during infiltration and the ability to load multiple vehicles on a CH-47 for insertions of great distances. The HMMWV platform provides more security and supports heavy weapons and anti-armor systems for additional QRF fire power. Internally the team should be equipped with suppressors for their small arms to prevent compromise when necessary. The scout teams must also possess long range sniper weapons too. The XM 107 or XM 110 is ideal for being able to reach out and destroy targets during a target interdiction mission or to protect the force during a break contact situation. Each team member must also be equipped with both a primary weapon and a sidearm. Moreover, the teams should also possess at least one M249 (SAW), with collapsible stocks, for gaining immediate fire superiority in a hasty engagement. The remainder of the team should be configured with an M4 carbine, with one member possessing a M203 (grenade launcher). Every

weapon must also be equipped with a night illuminator PEQ-2/4 and a day optic for close combat engagement (Advanced Combat Optical Gunsight, or Hologram, or Close Combat Optic). Other required optics for observation must include a hand held thermal site, like the Kollsman's optic which can range between three and seven kilometers, and the entire team must be equipped with either PVS-14 or PVS-7D night vision devices with multiplying power adapters for increased range.

Finally the TO&E must reflect the need for more mature individuals who possesses special skills training. The team needs to be comprised entirely of NCOs and must be trained in many unique capabilities. The team leader should be an E-7, the assistant team leader an E-6, and the remainder members are E-5s. Every member should also be qualified with the following skills: reconnaissance and surveillance leader (6B), ranger parachutist (V), jumpmaster (5W), military free fall (W8), pathfinder (F7), joint air tactical controller (5A), combat diver (W7), and one dive supervisor per team also (S6). These special skills will not only successfully enable the team to develop techniques for challenging entry situations, but provide individual confidence that mitigates risks. (see Figure 6)

Scout Teams (Rank, Skills, Weapons, and Radios)		
Team Leader	E-7	11B 4V F7 W8 6B S6
Asst Tm Leader	E-6	11B 3V W7 W8 6B
Radio Operator	E-5	11B 2V 5W W8 6B
Asst RTO	E-5	11B 2V 5W W8 6B
Senior Scout Observer	E-5	11B 2V F7 W8 6B
Scout Observer	E-5	11B 2V F7 W8 6B







					
M4 & 9mm PRC-148	M203 & 9mm PRC-148	M249 & 9mm PRC-148	XM107 & 9mm PRC-148	M4 & 9mm PRC-148 PRC-117	M4 & 9mm PRC-148 PRC-150

Figure 6: Recommended Scout Team composition and equipment

Scout Knowledge

An effectively equipped and trained scout team is only part of the solution. Successful intelligence collection will not occur if the individual team members are not also properly educated. Every scout unit must be educated in the following: a systems theory understanding,

cultural knowledge specific to potential deployment, and risk management. A systemic approach to every situation will enable the unit to better understand what the ‘real’ problem may be for each mission. A holistic view will also allow the scouts to better understand the enemy behaviors, their effects on them, and how to potentially predict future emergences. Ultimately, this new knowledge base will facilitate near-instant analysis from the teams because of their in-depth insights regarding culture, language, behavior, and customs.

Most important to this near-instant analysis is a SOD emphasis through an internal and external team discourse from their observation positions. Arguably, the cultural awareness begins with language proficiency and culminates with culture appreciation of the enemy’s religious beliefs, political system, forms of combat, and general behaviors. Although there is some technology that can enable this regional synthesis, like the language interpreting tool, the Phraselator, a complete cultural education process is essential.⁹¹ Teams should even be given a regional focus, like SFODAs, to enable a more focused approach to mission preparation. If a team possesses an understanding of the area of operations prior to insertion, it will subsequently enable the reduction of risk level for the mission. Risk management can not be learned through a series of risk management worksheets with an eventual conclusion of a numerical weight. Moreover, risk control is not only about educating the individuals who perform the missions, but more so how they educate the respective decision makers. Leaders can reduce their aversion to risk by embracing the standardization of teams and ensuring that they are properly educated, led, trained, equipped, and possess the right amount of lethality.

⁹¹ Military Intelligence unit in CONUS, *The Warfighters Guide 2004*. The Phraselator 1100 is a hand held, voice actuated phrase system. Phrases are translated in advance by native translators, recorded and saved in a phrase database. When an English phrase is spoken into the system, the translation is played back. The manufacturer has developed over 10,000 phrases in 48 different languages. Although it is not a two way translator, the Phraselator 2000 is expected to accomplish this task.

Future Employment Techniques

Improved organizational structure, education, and equipment will create unlimited potential for future deep ground reconnaissance operations. These operations will be capable of doing more than just successful intelligence collection, but provide ideal economy of force options for their commanders. Target interdiction is one of these capabilities. Aside from the capability to perform target acquisition, with all types of laser target designators, so that CAS or indirect fires may destroy an identified subject, teams now will have the ability to destroy a subject themselves. They will be capable of performing this task with any of their new long range direct fire weapons in their inventory. Long range ammunition can also facilitate this task for a standard M4 carbine, as proven in recent operations in Iraq by LRSU teams. The concept of teams operating in isolation of other unit members is no longer necessary either. Mutually supporting efforts must be embraced and incorporated into deep ground reconnaissance doctrine. Teams conducting over watch or providing close proximity QRF roles will have tremendous value in force protection and information gathering. This concept will provide one more tool for emergency extraction options and for overall risk reduction. Platoon operations, although formerly frowned upon by former LRSU operators, can be a force multiplying concept for deep ground reconnaissance. This concept offers situations that provide developmental experiences for platoon leaders and allows a platoon headquarters to support the teams from a static or roving mission support site. However, these platoon based mission support sites must possess vehicles to be able to perform this mission. A vehicle based mentality will increase mobility options and ultimately the overall flexibility of an operation. Depending on the vehicle size, CH-47 aircraft can provide deep insertion capabilities for the teams. Equipping scout units with mobility will undeniably facilitate more supplies, more fire power, greater mission depth, and a new method of

internal self-extraction for contingency options. (see Figure 7)

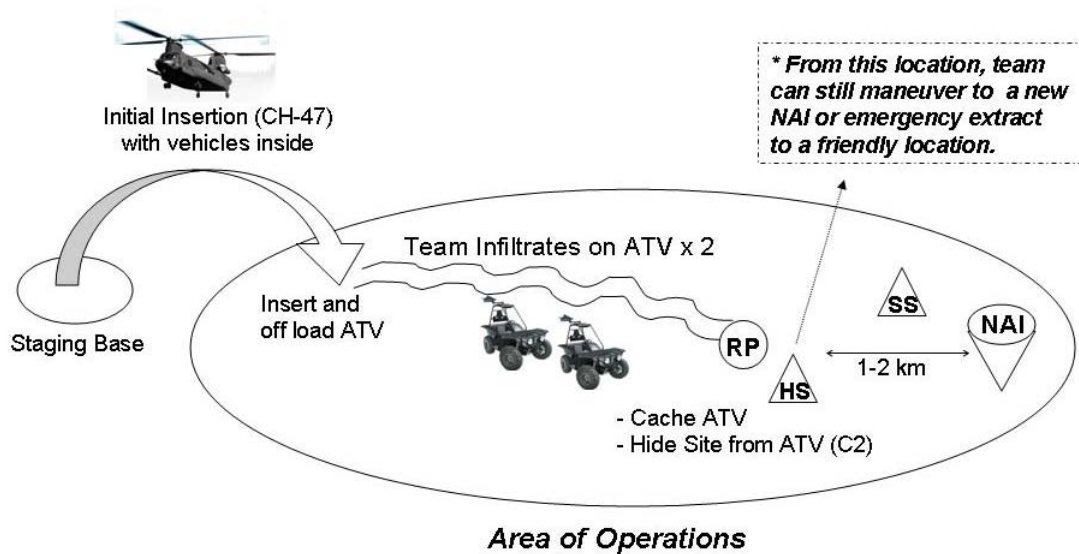


Figure 7: Technique for Mobility with Scout Teams

Recommended Future Research

Despite the credibility of previous recommendations, they only provide some initial insight into improving deep ground reconnaissance efforts for corps and divisions. Further investigation would be quite valuable in the areas that regard improving the synchronization of the ISR collection effort between a BCT and higher levels. The echeloning of reconnaissance assets is a constant challenge that creates dilemmas of how best to conduct a target hand-off. Recognizing the recent examples of non-contiguous areas of operation, one must accept that this issue will only become more complicated. Consideration of improved integration of AC and RC units in a deep ground reconnaissance organization is also pertinent. As the military continues to place emphasis on the RC relevance to the future force, there truly remains the need for further insight in this matter and the difficulties associated with this relationship. Future investigation of a centralized reconnaissance MOS may be of some value and the successful Marine Corps' example may provide some keen insight into the subject also.

Closing Remarks

In light of the current and potential future environments and the porous boundaries that exist between the divisions and corps there will continue to be a requirement for manned collection in this area. Deep ground reconnaissance operations, executed by informed and well-trained Soldiers, will continue to be important for the Army's divisions and corps. Educated and sufficiently equipped, these reconnaissance Soldiers will continue the warrior legacy of Socrates who creatively balanced physical battlefield heroics and cognitive genius. Undeniably, a consolidated human based reconnaissance organization of 'scouts', complemented with future technologies, will prove invaluable to influencing victory in future conflict. One may argue that a unified organization could hinder the development of habitual relationships and potentially force a need for a new scout MOS, but these perspectives are shallow.

Habitual relationships can still be maintained through an insightful task organizational process dictated from the commander of the Scout Brigade. Although this may not be effective all of the time, neither was the process of habitual relationships for LRSUs with their higher headquarters in recent GWOT operations. Arguably, a single track reconnaissance MOS may be a solution for the future organizing of a Scout Brigade, but it is currently unnecessary. The scout units can continue to be manned like the current RSTA and Armed Reconnaissance Squadrons are now, until a more refined solution crystallizes from the new armor and infantry Combined Maneuver Center at Fort Benning, GA. A potential outcome of this new concept may be the integration of the armor based Scout Leader Course and the infantry driven Reconnaissance and Surveillance Leader Course into one program of instruction; thus necessarily defeating the existing parochialisms that hinder progress within the reconnaissance community. The integration of a reconnaissance course at Fort Benning also provides a strong rationale for the Scout Brigade to be home stationed there. Fort Benning is capable of providing all the resource concerns for an airborne unit and all of the other special skills inherent in a Scout Brigade.

Moreover, the proximity of the Reconnaissance and Surveillance Unit Course's would be ideal to serve as the indoctrination course for the brigade.

Clearly the consolidated concept of the Scout Brigade is compatible with the Army Force Generation (ARFORGEN) model and will facilitate both a necessary battle rhythm for protracted GWOT missions and the modular force needs. It also negates the need to differentiate between the role of a detachment and a company, as the Scout Brigade is capable of supporting both a division's and a corps' needs. A centralized organization could likely produce subordinate elements that maintain cultural and regional focuses similar to SOF elements and provide flexible collection options through the use of mobility across the future battlespace.

In order for these ideal circumstances to take place the Army must break free of its' legacy thinking in regards to reconnaissance. Ultimately every potential intelligence collection situation must be approached with the heretical methodology of questioning everything. The potential of division and corps level collection teams is grossly untapped, yet it can be fully exploited with flexible doctrine and subversive thinking leaders. Such leadership can potentially provide a necessary new operational or strategic azimuth for intelligence collection if the data being collected is requiring a re-framing of the environment. Balancing technological advantages with the educated human collector will change the lens of which one views their threats and unquestionably enable future commanders to revise their respective objectives.

APPENDIX

<u>Long Range Reconnaissance Patrol</u>	<u>Long Range Patrol</u>	<u>75th Infantry Ranger Companies</u>
A. V Corp (LRRP)	A. Co D (LRP) 17th Inf.	A. Co A (RANGER) 75th Inf.
B. VII Corp (LRRP)	B. Co E (LRP) 20th Inf.	B. Co B (RANGER) 75th Inf.
C. 9th Inf. Div. (LRRP)	C. Co E (LRP) 30th Inf.	C. Co C (RANGER) 75th Inf.
D. 25th Inf. Div. (LRRP)	D. Co E (LRP) 50th Inf.	D. Co D (RANGER) 75th Inf.
E. 196th Inf. Bde. (LRRP)	E. Co F (LRP) 50th Inf.	E. Co E (RANGER) 75th Inf.
F. 1st Cav. Div. (LRRP)	F. Co E (LRP) 51st Inf.	F. Co F (RANGER) 75th Inf.
G. 1st Inf. Div. (LRRP)	G. Co F (LRP) 51st Inf.	G. Co G (RANGER) 75th Inf.
H. 4th Inf. Div. (LRRP)	H. Co E (LRP) 52nd Inf.	H. Co H (RANGER) 75th Inf.
I. 101st Abn. Div., 1st Bde. (LRRP)	I. Co F (LRP) 52nd Inf.	I. Co I (RANGER) 75th Inf.
J. 199th Inf. Bde. (LRRP)	J. Co C (LRP) 58th Inf.	J. Co K (RANGER) 75th Inf.
K. 173rd Abn. Bde. (LRRP)	K. Co E (LRP) 58th Inf.	K. Co L (RANGER) 75th Inf.
L. 3rd Inf. Div. (LRRP)	L. Co F (LRP) 58th Inf.	L. Co M (RANGER) 75th Inf.
	M. 70th Inf. DET (LRP)	M. Co N (RANGER) 75th Inf.
	N. 71st Inf. DET (LRP)	N. Co O (RANGER) 75th Inf.
	O. 74th Inf. DET (LRP)	O. Co P (RANGER) 75th Inf.
	P. 78th Inf. DET (LRP)	P. Co D (RANGER) 151st Inf.
	Q. 79th Inf. DET (LRP)	
	R. Co D (LRP) 151st Inf.	

Figure 8: Lineage of all LRP, LRRP, and Ranger Companies

BIBLIOGRAPHY

- Anders, David, *Long Range Surveillance Unit Application in Joint Vision 2010*, MMAS Thesis, 1999.
- Army Space Program Office, *Army Tactical Exploitation of National Capabilities (TENCAP) in the 21st Century*, 2005.
- Boot, Max, *The Savage Wars of Peace: Small Wars and the Rise of American Power*, New York, Basic books, 2002.
- Chamberlain, Major Robert L. and First Sergeant Ralph Kluna, *Long Range Surveillance Operations in Kosovo: Complementing Existing Capabilities*, Military Intelligence 27, no. 1, (January-February 2001), 47-52.
- Cole, Henry, *Bring Back the LRRP*, Strategic Studies Institute for the U.S. Army War College, 1981.
- Cochran, Lewis, *Human Intelligence: Long Range Surveillance for Force XXI*, SAMS Monograph, 1994.
- Department of the Army. *Army Campaign Plan*, 2004.
- Department of the Army. FM 7-93 *Long Range Surveillance Unit Operations*, Paladin Press, 1995.
- Department of the Army. FM 3.55-93 *Long Range Surveillance Operations*, Preliminary Draft, LRS doctrine, 2004.
- Department of the Army, FM 31-18, *Long Range Patrols*, Division, Corps, and Army. Washington, DC: Government Printing Office, 18 June 1962.

- Department of the Army, FM 31-18, *Infantry Long Range Patrol Company*, Washington, DC: Government Printing Office, 13 January 1965.
- Department of the Army, FM 31-18, *Infantry Long Range Patrol Company*, Washington, DC: Government Printing Office, 23 August 1965.
- Department of the Army, FM 31-18 C 1, *Infantry Long Range Patrol Company*, Washington, DC: Government Printing Office, 7 March 1969.
- Dorner, Dietrich, *The Logic of Failure: When Things Go Wrong and What We Can Do to Make Them Right*, New York, Metropolitan Books, 1989.
- Elford, George Robert, *Devil's Guard*, St. Petersburg, FL, Hailer Publishing, 1971.
- Fontenot, Gregory, Degen, E.J., Tohn, David, *On Point, the United States Army in Operation Iraqi Freedom, (though 01 May 2003)*, Fort Leavenworth, KS, Combat Studies Institute Press, 2004.
- Gebhart, James F., *Occasional Paper #10, Eyes Behind the Lines: US Army Long-Range Reconnaissance and Surveillance Units*, Fort Leavenworth, KS, Combat Studies Institute Press, 2005.
- Galula, David, *Counterinsurgency Warfare: Theory and Practice*, Westport, CT, Greenwood Press, 1964.
- Griffith, Samuel B., *Sun Tzu- The Art of War*, London, England, Oxford University Press, 1963.
- Hogan, David, W., *Raiders or Elite Infantry?: The Changing Role of the U.S. Army Rangers from Dieppe to Grenada*, Westport, CT, Greenwood Press, 1992.
- Keaveny, Valery, *Ensuring the Continued Relevance of Long Range Surveillance Units*, MMAS Thesis, 2002.
- Kensinger, Phillip R. LTG, Memorandum for Brigadier General John C. Woods, acting commander of Combined Arms Center, Subject: USASOC's Position on ARSOF in Reconnaissance and Surveillance Support, Fort Bragg, NC, 13 October 2005.
- Klein, Gary, *Sources of Power: How People Make Decisions*, Cambridge, Massachusetts, MIT Press, 2001.
- Laszlo, Ervin, *The Systems View of the World: A Holistic Vision for Our Time*, Cresskill, NJ, Hampton Press, 1996.
- Linderer, Gary A., *Six silent men: 101st LRP/Rangers*, Book Three. New York: Ivy Books, 1997.
- Marquis, Susan L., *Unconventional Warfare: Rebuilding U.S. Special Operations Forces*, Washington, DC, Brookings Institute Press, 1997.
- McBride, Captain David A., *Selecting and Training Long Range Surveillance Unit Commanders*, Infantry 82, no. 4 (July-August 1992).
- Military Intelligence unit in CONUS, *The Warfighters Guide*, 2004.
- Miller, Russell, *Behind the Lines: The Oral History of Special Operations in World War II*, New York, St Martins Press, 2002.
- Naveh, Shimon, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, London, England, Frank Cass Publisher, 1997.
- Naylor, Sean, *Not a God day to Die: The Untold Story of Operation Anaconda*, New York: Berkley Books, 2005.

Notes and lessons learned from the May 2004 Long Range Surveillance Symposium, sponsored by the 4th Ranger Training Battalion, Fort Benning, Georgia attending units XVIII Abn Corps LRSC, V Corps LRSC, 2 ID LRSD, 10th Mnt LRSD, 82nd Abn LRSD, JRTC LRS O/C, 29th ID LRSD, 38th ID LRSD, III Corps LRSC.

Notes from personal accounts (telephone and personal interviews with members of XVIII Airborne Corps LRSC)

O'Neill, Bard E., *Insurgency and Terrorism: Inside Modern Revolutionary Warfare*, Dulles, VA, Brassey Inc., 1990.

Parker, Geoffrey, *Cambridge Illustrated History of Warfare: The Triumph of the West*, New York, 1995.

Pressfield, Steven, *Gates of Fire*. New York: Bantam Books, 1999.

Quirk, Richard, J. III COL, *Intelligence for the Division: A G2 Perspective*, Carlisle Barracks, PA: US Army War College, 27 April 1992.

Reconnaissance and Surveillance Leader Course website (http://www-benning.army.mil/RTB/New_LRSC/Commander%20Corner.htm)

Ryan, Patrick E. *Intelligence, Surveillance, and Reconnaissance Operations*.

Scales, Robert H., *Culture-Centric Warfare*, Proceedings Magazine, (US Naval Institute, September 2004)

Schatzel, Captain John A., *LRSD: Adapt, Improvise, and Overcome*, Infantry Magazine 83, no. 1 (January-February 1993).

Senge, Peter M., *The Fifth Dimension*, New York, Doubleday, 1990.

Shakespeare, William, eNotes: William Shakespeare, Ed. Penny Satoris. Seattle: Enotes.com LLC, October 2002. 14 January 2006. <http://www.enotes.com/shakespeare-masters/>.

Stanton, Shelby L., *Rangers at War: LRRPs In Vietnam*, New York: Ivy Books, 1992..

Table of Organization and Equipment (TOE) 7-157E, *Infantry Long Range Patrol Company*, Washington, DC: Headquarters, Department of the Army, 28 September 1964.

Trinquier, Roger, *Modern Warfare: A French View of Counterinsurgency*, London, England, Pall Mall Press, 1964.

TRADOC Analysis Center, *Modularity Reports, Battlefield Surveillance Brigades, Phase II*, Fort Leavenworth, KS, 2005.

TRADOC Analysis Center, *Long Range Ground Reconnaissance Study (Final Report)*, Fort Leavenworth, KS, November 2005.

TRADOC Analysis Center, *Task Force Modularity: Integrated Analysis Report, Analysis Underpinnings Recommendation to the CSA*, Fort Leavenworth, KS, 31 March 2004.

TRADOC Analysis Center, *Task Force Modularity: The Role of Analysis in the Creation of the Modular Force*, Fort Leavenworth, KS, 01 July 2005.

TRADOC, *Army Comprehensive Guide to Modularity, version 1*, Fort Monroe, VA, October 2004.

TRADOC Pamphlet 525-42. *US Army Operational Concept for Long-Range Surveillance Units*, Fort Monroe: VA, 26 October 1984.

U.S. Army, *Army Transformation: A View from the U.S. Army War College*

- U.S. Army Command and General Staff College, *Intelligence for Commanders*, Fort Leavenworth, KS, 2004.
- U.S. Army Command and General Staff College, *F100: Force Management*, Fort Leavenworth, KS, 2004.
- U.S. Army Command and General Staff College , Initial Manuscript, First Draft, *Advance Plan Table of Organization and Equipment* 31-57 (Proposed), Long-Range Reconnaissance Patrol Company, Fort Leavenworth, KS, 18 November 1961.
- U.S. Army War College, *How the Army Runs: A Senior Leader Reference Handbook*, Carlisle, PA, 2003-2004.
- Waldrop, M. Mitchell, *Complexity: The Emerging Science at the Edge of Order and Chaos*, New York, Simon and Schuster, 1992.